



## Appendix C8

**ANALYSIS AND PRELIMINARY DETERMINATION FOR THE CONSTRUCTION AND  
OPERATION PERMITS FOR THE PROPOSED CONSTRUCTION  
OF TWO CYLINDER PRESS SCREENING LINES  
AND REPLACEMENT OF FOUR EXISTING SCREENING MACHINES  
AND  
FOR THE SIGNIFICANT REVISION OF OPERATION PERMIT # 662008930-F01  
FOR  
NORTHERN ENGRAVING CORPORATION,  
TO BE LOCATED AT  
20875 W. GALE AVE.,  
GALESVILLE, TREMPLEAU COUNTY, WISCONSIN**

Permit # 02-MEC-625 and 662008930-F02

Facility I.D. # 662008930

This review was performed by the Wisconsin Department of Natural Resources, La Crosse Service Center Air Program, 3550 Mormon Coulee Road, Room 104, La Crosse, WI 54601, phone (608) 785-9000 in accordance with Chapter 285, Wis. Stats., and Sections NR 400 to NR 499, Wis. Adm. Code.

Reviewed by: Mary Carter Initials: MEC Date: 7/16/2002

Peer review conducted by: /s/ BKE Date: 7/18/2002

Preliminary Determination Approved by:	Signature	Date
Regional Supervisor or Central Office Designee	<u>/s/ JEA</u>	7/18/2002
Compliance Engineer (reviewed/approved)	<u>/s/ MS</u>	7/18/2002

Attachment: AEI Forms

cc: J. Hanson - AM/7  
Galesville Public Library, 230 Main Street, Galesville, WI 54630-0697

## **INTRODUCTION**

Stationary sources that are not specifically exempt from the requirement to obtain a construction permit under s. 285.60(5), Wis. Stats. or ch. NR 406, Wis. Adm. Code may not commence construction, reconstruction, replacement, relocation or modification unless a construction permit for the project has been issued by the Department of Natural Resource's (DNR's) Air Management Program. Owners or operators subject to the construction permit requirements must submit a construction and operation permit application to the DNR. The application is reviewed following the provisions set forth in ss. 285.60 to 285.65, Wis. Stats. The criteria for permit issuance vary depending on whether the source is major or minor and whether the source is locating in an attainment or nonattainment area.

Any person holding an air pollution control operation permit who seeks a significant revision of the permit shall file a written request for revision of the permit with the Department. The request shall identify the permit to be revised, outline the specific provisions for which revision is sought, set forth the reasons why revision is sought, and comply with 285.62, Wis. Stats., and s. NR 407.05, Wis. Adm. Code. The Department shall use the procedures in Sections 285.62, Wis. Stats and ss. NR 407.07 and 407.09, Wis. Adm. Code when processing requests for significant revisions.

Subject sources are to be reviewed with respect to the equipment and facility description provided in the application and for the resulting impact upon the air quality. The review ensures compliance with all applicable rules and statutory requirements. The plan review will show why the source(s) should be approved, conditionally approved, or disapproved. It will encompass emission calculations and an air quality analysis using U.S. EPA models, if applicable. As a precautionary note, the emission estimates are based on U.S. EPA emission factors (AP-42) or theoretical data and can vary from actual stack test data.

The sources included in this construction permit are also required to obtain an operation permit under s. 285.60(1)(b), Wis. Stats. This review constitutes the Department's review of applications for both the construction permit and the operation permit for these units. This review may be updated when the compliance demonstration information is received. An operation permit may be issued after the applicant demonstrates that the sources included in the construction permit are in compliance with the applicable rules, emission limits and the conditions. Completion of this project will also result in a revision of the facility-wide operation permit. Once construction is complete and compliance with applicable requirements has been demonstrated, a revised facility-wide operation permit may be issued which incorporates the requirements of the construction permit. This preliminary determination also addresses the development of the revised facility-wide operation permit.

## **GENERAL APPLICATION INFORMATION**

Owner/Operator:	Northern Engraving Corporation 803 Black River Street Sparta, WI 54656
Contact:	Mary Goodman, (608) 366-3800 ext 842
Responsible Official:	Bruce Corning - Vice President, Management Systems (608) 366-3800
Submitted By:	Mary Goodman, (608) 366-3800 ext 842
Date of Complete Application:	7/9/2002

## **PROJECT DESCRIPTION**

The permittee is proposing to make changes to an existing screening line, P01 which currently consists of 12 screening lines which are made up of 25 screening machines plus one that is not on any line that can be switched with other machines, 6 electric drying ovens and 8 natural gas/propane ovens with a total maximum rating of 10.5 mmBtu per hour. They plan to install one cylinder press line which will replace two screening machines and one curing oven included in P01 and the two screening machines and drying ovens identified as line PSM-G-04. They plan to install a second cylinder press line which will replace the two screening machines and drying oven identified as line PSM-G-10. They also plan to replace four existing screening machines with four new screening machines. These new machines could replace existing machines on the following lines PSM-G-01, PSM-G-02, PSM-G-03, PSM-WS-79, PSM-G-11, PSM-G-12, PSM-G-13, PSM-G-14, PSM-G-26 or on lines PSM-G-04 OR PSM-G-10 if those lines are not replaced with the cylinder press lines for some reason. After the proposed changes are made, P01 will consist of 11 screening lines which are made up of 21 screening machines plus one that is not on any line and can be switched with other machines, 8 electric drying ovens, and 5 natural gas/propane ovens with a total maximum rating of 6.5 mmBtu per hour. A construction permit is required for this project pursuant to s. NR 406.04(2), Wis. Adm. Code because the increase in maximum theoretical VOC emissions from the project will be greater than 5.7 pounds per hour. The proposed changes will be incorporated into a significant revision of the facility's operation permit (permit number 662008930-F01).

**Special Note:** The permittee elected into a Cooperative Agreement with the Department for their Sparta and Holmen facilities under the Environmental Cooperation Pilot Program authorized by s. 299.80, Wis. Stats on June 10, 2002. The aim of the Environmental Cooperation Pilot Program is to evaluate innovative environmental regulatory methods while providing the same level of protection of public health and the environment as provided under current applicable state and federal requirements. A Cooperative Agreement provides an opportunity for greater flexibility and reduced paperwork and administrative tasks and encourages sources to reduce pollution to levels below those required by state and federal requirements. Section 299.80, Wis. Stats. encourages public participation through an interested persons group. The greater flexibility afforded by the Cooperative Agreement allows variances from requirements under chs. 280 to 295, Wis. Stats. and the Administrative Codes promulgated under those chapters provided the variance results in a measurable reduction in overall levels of pollution and contains pollution limits that are verifiable, enforceable, and at least as stringent as pollution limits under chs. 280 to 295, Wis. Stats. and the rules promulgated under those chapters. Additionally the variance must either promote the reduction in overall levels of pollution to below the levels required under chs. 280 to 295, Wis. Stats. or provide for alternative monitoring, testing, record keeping, notification or reporting requirements that reduce the administrative burden on state agencies or the participant and that provide the information needed to ensure compliance with the Cooperative Agreement and the provisions of chs. 280 to 295, Wis. Stats. and rules promulgated under those chapters for which the Cooperative Agreement does not grant a variance. The Cooperative Agreement entered into by the Department and Northern Engraving on June 10, 2002 has a term of five years with the possibility of a renewal for up to five additionally years and allows for the addition of other Northern Engraving facilities in the agreement. The Cooperative Agreement between Northern Engraving Corporation and the Department and supporting background information is contained in separate documents that are available for public review. The Galesville facility was originally included in the negotiations for this Cooperative Agreement, but was removed when it appeared that the facility would be discontinuing operation. This is no longer the case and Northern Engraving has indicated that they would like the Agreement amended to include the Galesville facility. For this reason, this significant revision of operation permit 662008930-F01 will incorporate the permit language in Part I.A. that would cover the facility's operations should the Cooperative Agreement be amended. Issuance of this revised operation permit does not constitute Department approval of any amended agreement and Part I.B. of the revised operation permit would be in effect until such a time when the Cooperative Agreement is amended to include the Galesville facility. This preliminary determination to issue Northern Engraving Corporation a revised operation permit for their Galesville facility highlights the proposed variances from air pollution control provisions of ch. 285, Wis. Stats, ss. NR 400 to 499, Wis. Adm. Code, and requirements contained in air pollution control permits currently held by the company.

## **SOURCE DESCRIPTION**

Northern Engraving Corporation manufactures decorative plastic automotive trim and nameplates for the automotive and appliance industries. Operations include screening of plastic sheets, punch pressing, laser cutting and etching, inspection, spray touch-up, shipping and receiving. Note: All other air pollution sources at the facility are covered under the original operation permit for the facility (permit number 662008930-F01) and details on the sources are included in the preliminary determination document for that permit.

### Description of New or Modified Equipment:

Process P01, Stack S01: The permittee is proposing changes to existing process P01. Construction of two cylinder press screening lines (PSO-G-37 and PSO-G-38) which will replace two screening machines and one curing oven included in P01, the two screening machines and drying ovens identified as line PSM-G-04, and the two screening machines and drying oven identified as line PSM-G-10. Each of the proposed cylinder press screening lines will consist of one screening machine and one electric drying oven. Replacement of four existing screening machines with four new screening machines. These new machines could replace existing machines on the following lines PSM-G-01, PSM-G-02, PSM-G-03, PSM-WS-79, PSM-G-11, PSM-G-12, PSM-G-13, PSM-G-14, PSM-G-26 or on lines PSM-G-04 OR PSM-G-10 if those lines are not replaced for some reason.

In total the permittee is proposing to remove 6 screening machines and 3 natural gas/propane ovens with a total rating of 4.0 mmBtu per hour. These will be replaced with two cylinder press screening lines each with one screening machine and one electric oven. They will also be removing four individual screening machines and replacing them with four new screening machines. Therefore, the permittee is proposing to install 6 new screening machines and two new electric ovens.

After the proposed changes are made, P01 will consist of 11 screening lines which are made up of 21 screening machines plus one that is not on any line and can be switched with other machines, 8 electric drying ovens, and 5 natural gas/propane ovens with a total maximum rating of 6.5 mmBtu per hour. The screening lines that will exist after the changes include PSM-G-01, PSM-G-02, PSM-G-03, PSM-WS-79, PSM-G-11, PSM-G-12, PSM-G-13, PSM-G-14, PSM-G-26, PSM-G-16, PSO-G-37, and PSO-G-38.

Application technique:	Screen Printing
Transfer Efficiency:	100%
Number of ovens:	8 electric, 5 natural gas propane
Type of Fuel:	natural gas/propane
Maximum Heat Input Rating:	new ovens are electric - total rating of natural gas/propane ovens after changes is 6.5 mmBtu/hr
Maximum Ink Usage Rate:	18.6 gallons per hour (from all lines after changes) 8.4 gallons per hour (from new lines and replacement machines)
Maximum Ink VOC Content:	6.5 pounds per gallon
Maximum Clean-up Solvent Usage:	1.2 gallons per hour
Maximum Clean-up VOC Content:	7.59 pounds per gallon
Substrate Coated:	Plastic
Anticipated Date of Construction:	August 2002

*S01 {represents actual exhaust points from 11 conveyORIZED drying ovens and 2 box ovens}*

Height:	Each stack from ovens associated with the two cylinder press screening lines and replacement screening machines will be a minimum of 25 feet.
Diameter:	The equivalent diameter from the 15 stacks associated with P01 is 5.3 feet. The two exhaust stacks from PSO-G-37 each have a diameter of 1.5 feet and the two exhaust stacks from PSO-G-38 each have a diameter of 1.5 feet.
Exhaust flow rate:	The total air flow from all stacks is 28,000 ACFM (average). The air flow from the two exhaust stacks from PSO-G-37 are 1825 ACFM and 2880 ACFM. The air flow from the two exhaust stacks from PSO-G-38 are 1825 ACFM and 2880 ACFM.
Exhaust temperature:	140 °F (normal)
Discharge direction:	Up (unobstructed)

### **APPLICABLE REQUIREMENTS**

For specific calculations please refer to the hand calculation sheets.

11 Screening Lines P01: Maximum theoretical emissions were calculated using worst case material usage rates, solid contents, volatile organic compound contents and hazardous pollutant contents. Because the lines were installed after April 1, 1972 and particulate matter emissions are created from fuel combustion in the ovens, the lines

are subject to s. NR 415.06(2)(a), Wis. Adm. Code which limits particulate matter emissions to not more than 0.15 pounds per mmBtu of heat input. Because the lines were constructed after April 1, 1972 they are subject to s. NR 431.05, Wis. Adm. Code which limits visible emissions to not more than 20 percent opacity.

Screening lines PSM-G-01, PSMG-G-02, PSM-G-03, PSM-G-04, PSM-WS-79, PSM-G-10, PSM-G-11, PSM-G-12, PSM-G-13 AND PSM-G-14 are subject to s. NR 424.03(2)(c), Wis. Adm. Code which requires the use of the latest available control techniques and operating practices demonstrating best current technology (LACT) to control volatile organic compound emissions. As part of the review for the alteration of permit 84-IRS-032 dated May 27, 1987, the Department determined 85 percent control of volatile organic compound emissions to be technologically infeasible and determined LACT to be the use of coatings or inks with a maximum VOC content of 6.5 pounds per gallon as applied. Lines PSM-G-04 and PSM-G-10 will be replaced by the 2 cylinder press screening lines (PSO-G-37 and PSO-G-38) proposed in this permit. Additionally, LACT will be clarified to indicate that non-UV inks and adhesives are subject to a limitation of 6.5 pounds per gallon as applied while UV inks and watermarks used on the screening lines will be subject to a LACT limitation of 1.0 pounds VOC per gallon as applied.

Screening line PSM-G-26 is subject to s. NR 424.03(2)(c), Wis. Adm. Code which requires the use of the latest available control techniques and operating practices demonstrating best current technology (LACT) to control volatile organic compound emissions. As part of the review for permit 84-IRS-032A issued on May 3, 1989, the Department determined 85 percent control of volatile organic compound emissions to be technologically infeasible and determined LACT to be the use of coatings or inks with a maximum VOC content of 6.4 pounds per gallon as applied. The screening machine included in line PSM-G-02 replaced under permit 98-RV-042 issued on May 27, 1998, the screening machine included in line PSM-G-13 replaced under permit 98-RV-042, the screening line including 2 machines and a 1.5 mmBtu per hour oven installed under 98-RV-042, the one screening machine and one hand screening machine included in line PSM-G-03 installed under permit 97-RV-160-R1 issued on May 26, 1998, and the screening machine included in line PSM-G-26 replaced under permit 97-RV-160-R1 are subject to s. NR 424.03(2)(c), Wis. Adm. Code which requires the use of the latest available control techniques and operating practices demonstrating best current technology (LACT) to control volatile organic compound emissions. As part of the review for the above construction permits, the Department determined 85 percent control of volatile organic compound emissions to be technologically infeasible and determined LACT to be the use of coatings or inks with a maximum VOC content of 6.6 pounds per gallon as applied.

Note: Because of the logistical difficulties of some individual machines in the same screening line have different LACT limitations (some 6.4 pounds per gallon, some 6.5 pounds per gallon, and some 6.6 pounds per gallon), a LACT limitation of 6.5 pounds per gallon will be used for all machines on all of the screening lines. Furthermore, LACT will be clarified to indicate that non-UV inks and adhesives are subject to a limitation of 6.5 pounds per gallon as applied while UV inks and watermarks used on the screening lines will be subject to a LACT limitation of 1.0 pounds VOC per gallon as applied.

This process is subject to the general limitations for sulfur dioxide, carbon monoxide and nitrogen oxides contained in ss. NR 417.03, NR 426.03 and NR 428.03, Wis. Adm. Code, respectively. These general limitations would be included in Part II of any permit issued by the Department.

Note: All other applicable requirements found in the original Operation Permit would be retained in any revised Operation Permit issued by the Department.

#### **NR 445 WATCH LIST POLLUTANTS**

The sources included in this proposed project do not have the potential to emit pollutants covered under the ch. NR 445 Watch List.

#### **COMPLIANCE AND TECHNOLOGY REVIEW**

For details on specific compliance demonstration methods, please refer to the Draft Permit.

11 Screening Lines P01: To demonstrate compliance with particulate matter and visible emission limitations the permittee would be required to retain plans and specifications of each curing oven that indicate they are designed to only burn natural gas and propane. This is an adequate compliance demonstration method because the maximum theoretical emissions while firing these fuels are less than the allowable particulate matter emission limit. Additionally, because natural gas and propane are clean burning fuels it is not expected that the visible emission

limitations would be exceeded while firing them. Please see the Draft Permit for specific compliance demonstration methods. To demonstrate compliance with the LACT VOC content limitation the permittee would be required to keep records of each ink and other VOC containing material used and the VOC content as applied. The permittee would be required to use U.S. EPA Method 24, or coating manufacturer's formulation data to determine the VOC content of the materials used.

Note: All other compliance demonstration methods found in the original Operation Permit would be retained in any revised Operation Permit issued by the Department.

### **AIR QUALITY REVIEW**

A detailed modeling analysis was completed as part of the original operation permit review by John Roth on February 28, 2001. This analysis assessed the impact of the particulate matter, sulfur dioxide, nitrogen oxide, carbon monoxide, 2-butoxyethanol, cyclohexanone, diacetone alcohol, naphthalene, sodium hydroxide, and toluene emissions from Northern Engraving Company in Galesville, Trempealeau County. The results which are listed in the Air Quality Review section of the Preliminary Determination for permit 662008930-F01 demonstrate that all applicable ambient air quality standards will be attained and maintained assuming the emission rates and stack parameters listed in the source table of Roth's February 28, 2001 memo. The changes proposed in this permit will result in a decrease in the potential emission rate of all criteria pollutants and either a decrease or no change in the potential emission rates of the hazardous air pollutants listed above. For this reason a detailed modeling analysis was not performed as part of the review for the proposed changes but it is assumed that the applicable ambient air quality standards will continue to be attained and maintained.

### **EMISSIONS FROM NEW EQUIPMENT OR MODIFICATION**

#### **I. TOTAL EMISSIONS FROM PROPOSED CHANGES ONLY - Two New Cylinder Press Screening lines (PSO-G-37 and PSO-G-38) and Four Replacement Screening Machines to replace machines on other existing lines - Installed August 2002**

Pollutant	Maximum Theoretical		Potential to Emit		Maximum Allowables	
	lbs/hr	TPY	lbs/hr	TPY	lbs/hr	TPY
VOCs	93.2	408.22	93.2	#	93.2	408.22

#### **HAZARDOUS AIR POLLUTANT EMISSIONS FROM PROPOSED CHANGES:**

Pollutant	Maximum Theoretical		Potential to Emit	
	lbs/hr	TPY	lbs/hr	TPY
2-butoxyethanol	30.24	132.45	30.24	##
n-butyl alcohol	1.50	6.58	1.50	##
cumene	0.27	1.20	0.27	##
cyclohexanone	29.07	127.33	29.07	##
diacetone alcohol	22.73	99.56	22.73	##
ethyl benzene	3.00	13.16	3.00	##
Glycol ether	44.67	195.67	44.67	##
methyl n-amyl ketone	3.00	13.16	3.00	##
naphthalene	3.23	14.13	3.23	##
stoddard solvent	3.72	16.30	3.72	##

xylene	7.87	34.49	7.87	##
--------	------	-------	------	----

**II. TOTAL EMISSIONS FROM PROCESS P01, STACK S01 AFTER PROPOSED CHANGES: -11 Screening Lines which are made up of 21 screening machines plus one that is not on any line and can be switched with other machines, 8 electric drying ovens, and 5 natural gas/propane ovens with a total maximum rating of 6.5 mmBtu per hour. (The screening lines that will exist after the changes include PSM-G-01, PSM-G-02, PSM-G-03, PSM-WS-79, PSM-G-11, PSM-G-12, PSM-G-13, PSM-G-14, PSM-G-26, PSM-G-16, PSO-G-37, and PSO-G-38)**

Pollutant	Maximum Theoretical		Potential to Emit		Maximum Allowables	
	lbs/hr	TPY	lbs/hr	TPY	lbs/hr	TPY
Particulate matter emissions	0.05	0.22	0.05	0.22	0.98	4.27
Sulfur Dioxide	0.004	0.017	0.004	0.017	0.004	0.017
Nitrogen oxides	1.34	5.88	1.34	5.88	1.34	5.88
Carbon Monoxide	0.55	2.39	0.55	2.39	0.55	2.39
VOCs	188.42	825.26	188.42	#	188.42	825.26

**HAZARDOUS AIR POLLUTANT EMISSIONS FROM P01**

Pollutant	Maximum Theoretical		Potential to Emit	
	lbs/hr	TPY	lbs/hr	TPY
2-butoxyethanol	66.96	293.28	66.96	##
n-butyl alcohol	3.33	14.57	3.33	##
cumene	1.61	7.02	1.61	##
cyclohexanone	64.37	281.94	64.37	##
diacetone alcohol	50.33	220.45	50.33	##
ethyl benzene	6.65	26.13	6.65	##
Glycol ether	98.92	433.28	98.92	##
methyl n-amyl ketone	6.65	29.13	6.65	##
naphthalene	7.14	31.28	7.14	##
stoddard solvent	8.24	36.09	8.24	##
xylene	18.88	82.67	18.88	##

**TOTAL FACILITY EMISSIONS AFTER PROPOSED CHANGES**

Pollutant	Maximum Theoretical Emissions	Potential to Emit Under Title V Operation Permit	Maximum Allowable Emissions	Potential to Emit Under the Cooperative Agreement

	TPY	TPY	TPY	TPY
Particulate Matter Emissions	0.22	0.22	4.27	0.22
Sulfur Dioxide	0.017	0.017	0.017	0.017
Nitrogen Oxides	5.88	5.88	5.88	5.88
Carbon Monoxide	2.39	2.39	2.39	2.39
VOCs	951.49	99.0	951.49	85.25
Total CAA HAPs	651.49	24.96	651.49	20

Hazardous Air Pollutant	Potential to Emit		NR 445, Wis. Adm. Code Threshold Value (stacks <25 ft)		PTE greater than Table Value?
	(lbs/hr)	(tpy)		Units	
benzene	0.00054	0.0024	0.15000	tpy	no
2-butoxyethanol*	66.96	##	9.99360	lbs/hr	yes
n-butyl alcohol*	3.33	##	7.59600	lbs/hr	no
cumene	2.06	9.00	20.40480	lbs/hr	no
cyclohexanone*	82.17	##	8.32800	lbs/hr	yes
diacetone alcohol*	50.33	##	19.98720	lbs/hr	yes
diisobutyl ketone*	0.9	3.96	7.245000	lbs/hr	no
ethyl benzene	6.65	##	36.228000	lbs/hr	no
			105.195500	tpy	no
glycol ethers	98.92	##	na		
n-hexane	0.00054	0.0024	14.9904	lbs/hr	no
			21.0390	tpy	no
methyl n-amyl ketone*	6.65	##	19.57200	lbs/hr	no
methyl ethyl ketone	4.52	##	na		
naphthalene	7.14	##	4.1640	lbs/hr	yes
sodium hydroxide*	0.28	1.23	0.100800	lbs/hr	yes
stoddard solvent*	8.24	##	43.7232	lbs/hr	no
toluene	9.96	##	31.2312	lbs/hr	no
			42.0785	tpy	yes
trimethyl benzene*	4.53	##	10.4112	lbs/hr	no



Hazardous Air Pollutant	Potential to Emit		NR 445, Wis. Adm. Code Threshold Value (stacks <25 ft)		PTE greater than Table Value?
	(lbs/hr)	(tpy)		Units	
xylylene	20.17	##	36.22800	lbs/hr	no
<b>Total HAPS regulated by the CAA</b>		##			

HAP = hazardous air pollutant

CAA = Clean Air Act

na = not applicable

\* denotes state-only HAPs

# The permittee has elected restrictions to limit the potential VOC emissions from the facility to not more than 85 tons per year while operating under the Cooperative Agreement and to less than 100 tons per year otherwise. See total facility emissions summarized above. These more restrictive limitations would be included in any Operation Permit issued by the Department. Note: VOC emissions from use of materials containing VOCs will be limited to 85 tons per year. The additional 0.25 tons of VOCs per year are from combustion of natural gas and propane at the facility

## The permittee has elected restrictions to limit the potential emissions of all HAPs regulated by the Clean Air Act to not more than 20 tons per year while operating under the Cooperative Agreement and to less than 25 tons per year otherwise. The permittee has elected restrictions to limit the potential emissions of each HAP regulated by the Clean Air Act to not more than 8 tons per year while operating under the Cooperative Agreement and to less than 10 tons per year otherwise. These more restrictive limitations would be included in any Operation Permit issued by the Department.

#### **WISCONSIN HAZARDOUS AIR POLLUTANT (NR 445) REVIEW**

A complete review of hazardous air pollutant emissions was completed with the review for the original operation permit. That review indicated that emissions from firing natural gas and propane, which are group I virgin fossil fuels, in the ovens associated with P01 are exempt from ch. NR 445, Wis. Adm. Code requirements, pursuant to ss. NR 445.04(1)(c)1., (3)(c)1., (4)(c)1., and (4r)(b)1. and ss. NR 445.05(1)(c)1., (3)(c)1., (4)(c)1., and (4r)(b)1., Wis. Adm. Code. Potential emissions of all other hazardous pollutants regulated by ch. NR 445, Wis. Adm. Code were below the corresponding Table Values with the exception of 2-butoxyethanol, cyclohexanone, diacetone alcohol, naphthalene, sodium hydroxide, and toluene. A modeling analysis of these pollutants showed that the impact from the facility are less than their respective acceptable ambient concentration. See the Air Quality Review section of the Preliminary Determination for permit 662008930-F01 for details.

After the proposed changes, potential emissions of all non-exempt hazardous pollutants regulated by ch. NR 445, Wis. Adm. Code are still below the corresponding Table Values with the exception of 2-butoxyethanol, cyclohexanone, diacetone alcohol, naphthalene, sodium hydroxide, and toluene. While potential emissions of these pollutants are still greater than the corresponding Table Values the potential emissions after the proposed changes are either less than or equal to the emission rates determined in the original operation permit and used in the original modeling analysis. Therefore, the impact the facility has on the acceptable ambient concentrations of these pollutants will be either the same or less after the proposed changes are made. For this reason, the modeling analysis was not redone using the lower emission rates, but it was assumed that the acceptable ambient concentrations will be protected.

#### **FACILITY AND PROJECT CLASSIFICATION**

1. **Existing Facility Status:** The facility is located in an area classified as attainment/unclassified for all criteria pollutants. The facility is not included in the listed PSD source categories and operation permit number 662008930-F01 limits the potential emissions of each criteria pollutant to less than 250 tons per year. Therefore the facility is considered a synthetic minor source for PSD purposes. The facility is currently considered a synthetic minor source for Part 70 purposes because the existing operation permit limits the potential volatile organic compound emissions to less than 100 tons per year; limits the potential emissions of individual hazardous air pollutants regulated by the Clean Air Act to less than 10 tons per year; and limits the potential emissions of all hazardous air pollutants regulated by the Clean Air Act combined to less than 25 tons per year.

2. **Project Status:** The limitations on potential volatile organic compound and hazardous air pollutant emissions included in the original operation permit will also be included in any revised operation permit issued by the Department. Therefore the proposed project is considered a minor modification for PSD purposes. As such, it is not subject to the requirements of section 112(g).

3. **Facility Status After Completion of Project:** The limitations on potential volatile organic compound and hazardous air pollutant emissions included in the original operation permit will also be included in any revised operation permit issued by the Department. Therefore, after completion of this project, the facility would continued to be considered a synthetic minor source for PSD purposes and a synthetic minor source for Part 70 purposes.

4. **Summary:**

NSR Applicability	Existing Facility		Proposed Project		Facility After Project	
	Major	Minor	Major	Minor	Major	Minor
PSD		XX		XX		XX
Non-Attainment	not applicable					
Federal HAP		XX		XX		XX

Part 70 Applicability	Existing Facility			Facility After Project		
	Part 70	FESOP (Syn. Minor)	non-part 70	Part 70	FESOP (Syn. Minor)	non-part 70
Status		XX			XX	

### **ENVIRONMENTAL ANALYSIS**

The proposed project is a Type III action under Chapter NR 150, Wis. Adm. Code, because there is a potential increase in hazardous emissions and the potential to emit of the project is less than 100 TPY for each criteria pollutant. A news release is required for this proposal and is included in the public comment notice. It is proposed that an environmental assessment not be completed.

### **NEW SOURCE PERFORMANCE STANDARDS (NSPS) APPLICABILITY**

**For proposed construction of a source:**

1. Is the proposed source in a source category for which there is an existing or proposed NSPS? No.
2. Is the proposed source an affected facility? No.

**For the proposed modification of an existing source:**

1. Is the existing source, which is being modified, in a source category for which there is an existing or proposed NSPS? No.
2. Is the existing source, which is being modified, an affected facility (prior to modification)? Not applicable.
3. Does the proposed modification constitute a modification under NSPS to the existing source? Not applicable.
4. Will the existing source be an affected facility after modification? Not applicable.

### **NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAPS) APPLICABILITY**

**Part 61 NESHAPS:**

1. Will the proposed new or modified source emit a pollutant controlled under an existing or proposed

- NESHAPS? No
2. Is the proposed new or modified source subject to an existing or proposed NESHAPS? No

Part 63 NESHAPS:

1. Will the proposed new or modified source emit a pollutant controlled under an existing Part 63 NESHAPS?  
No
2. Is the proposed new or modified source subject to an existing Part 63 NESHAPS? No
3. Is the proposed project subject to s. 112(g) of the Clean Air Act? No.

**CRITERIA FOR PERMIT APPROVAL**

Section 285.63, Wis. Stats., sets forth the specific language for permit approval criteria. The Department finds that:

1. The source will meet emission limitations.
2. The source will not cause nor exacerbate a violation of an air quality standard or ambient air increment.
3. The source is operating or seeks to operate under an emission reduction option. Not Applicable.
4. The source will not preclude the construction or operation of another source for which an air pollution control permit application has been received.

**INFORMATION REGARDING THE INCORPORATION OF COOPERATIVE AGREEMENT LANGUAGE AS PART OF THE SIGNIFICANT REVISION OF OPERATION PERMIT 662008930-F01**

**Variances Granted Under the Cooperative Agreement between Northern Engraving and the Department:**

Part I.A. of the attached Draft Operation Permit includes the requirements the permittee would be required to meet while operating under an approved Cooperative Agreement. Part I.B. includes the permittee's applicable requirements under ch. 285, Wis. Stats. and ss. NR 400 to 499, Wis. Adm. Code as described above. Part I.B. of the draft permit would become effective if the proposed Cooperative Agreement expires or is revoked for any reason. The proposed variances under Part I.A. of the Draft Operation Permit and the proposed Cooperative Agreement are as follows:

1. Item: Waiver from the requirement to obtain a construction permit prior to commencing construction and initial operation of new process equipment, commencing modification and initial operation of existing equipment, or relocating existing process equipment between Northern Engravings Holmen, Sparta, and Galesville facilities.

Previous Requirements to be Superseded by the Cooperative Agreement [source of the requirement]:

Requirement to obtain a construction permit prior to construction, reconstruction, replacement, relocation or modification of a minor stationary source that is not otherwise exempt under s. NR 406.04, Wis. Adm. Code [s. NR 406.03, Wis. Adm. Code]

Proposed Requirement Under Cooperative Agreement:

**a. New Equipment Construction and Modification:** The permittee may commence construction or modification (but not operation) of new process equipment prior to obtaining a construction permit, provided the following conditions are met. The following conditions do not apply if a proposed project is exempt from the requirement to obtain a construction permit, pursuant to s. NR 406.04, Wis. Adm. Code. [s. 299.80(2)(h) and (4)(b), Wis. Stats.]

- (1) The permittee shall submit the following information to the Department of Natural Resources, La Crosse Area Office, 3550 Mormon Coulee Road, Room 104, La Crosse, WI, 54601 **OR** other location specified by the Department:
- (a) Two copies of a complete construction and operation permit application describing the proposed equipment;
- (b) An application fee of \$1350 or other amount as required by s. NR 410.03(1)(d), Wis. Adm. Code; and
- (c) Information describing how the interested persons group was notified of the proposed project. [ss. 299.80(10) and (11)(b), Wis. Stats.]

- (2) The Department shall process the permit application in accordance with ss. 285.60 through 285.69, Wis. Stats and ss. NR 406 and NR 407, Wis. Adm. Code, however, the permittee need not wait for permit issuance to commence construction. The Department shall process the permit application as both a construction permit and a significant revision to this operation permit and issue both permits simultaneously to reduce the administrative burden of issuing a construction permit that expires 18 months after issuance followed by an operation permit. The Department shall send an invoice outlining the fees required for processing the construction permit for the proposed project, including the fees for an expedited permit review authorized by s. NR 410.03(o), Wis. Adm. Code, less the \$1350 permit application fee. [ss. 299.80(2)(h), (4)(b), (10) and (11)(b), Wis. Stats.]
- (3) The permittee shall pay the total amount of the fee invoice within 30 days of receipt.<sup>1</sup> [s. 299.80(10), Wis. Stats.]
- (4) The permittee shall continue to comply with all the requirements of Part I.A. of this permit so long as the cooperative agreement is in affect.<sup>2</sup> [s. 299.80(2)(h) and (4)(b), Wis. Stats.]
- (5) Nothing in this section or in any Cooperative Agreement between the Department and the permittee shall be construed as a guarantee that the Department will issue an air pollution control construction and operation permit for a proposed project. The decision on whether to approve a permit application will be made according to the requirements of chapters NR 400 through NR 499, Wis. Adm. Code and s. 285.60 through 285.69, Wis. Stats. If the Department denies a permit application pursuant to ss 285.61 through 285.64, Wis. Stats. all costs and risks associated with installing and operating the proposed equipment shall be incurred solely by the permittee. In the event that the construction and operation permit application for the proposed project is denied, the permittee shall cease construction of the equipment in question immediately.

**b. New Equipment Operation:** The permittee may operate new process equipment, provided one of the following alternate scenarios are met. The following conditions do not apply if a proposed project is exempt from the requirement to obtain a construction permit, pursuant to s. NR 406.04, Wis. Adm. Code. [s. 299.80(2)(h) and (4)(b), Wis. Stats.]

- (1) *Alternate Scenario #1:* The permittee may operate new process equipment provided the permittee submits a complete construction and operation permit application as required by the conditions of I.A.5.a. and the Department issues a construction permit pursuant to ss. 285.60 through 285.69, Wis. Stats and ss. NR 406 and NR 407, Wis. Adm. Code. The permittee shall operate the new process equipment in compliance with the conditions contained in any construction permit issued by the Department. [s. NR 406.03, Wis. Adm. Code]

---

<sup>1</sup> Pursuant to s. 299.80(10), Wis. Stats., a participant in a cooperative agreement shall pay the same fees required under chs. 280 to 295, Wis. Stats. that it would be required to pay if it had not entered into a cooperative agreement. Therefore, while the requirement to obtain a construction permit prior to installation is waived, the permittee is still required to pay the fees that would have been assessed had a construction permit been issued under ch. NR 406, wis. Adm. Code.

<sup>2</sup> By continuing to comply with the facility wide emission limitations outlined in Part I.A. the net emissions increase from any new sources or relocation of any existing sources from other facilities, will not exceed the major stationary source levels of s. NR 405.02(22)(a), Wis. Adm. Code triggering Prevention of Significant Deterioration (PSD) Requirements. The existing facility potential emissions of all criteria pollutants is less than 250 tons per year and the facility is not included in the source categories listed in s. NR 405.07(4), Wis. Adm. Code, therefore the existing facility is a synthetic minor source for PSD purposes. Note: This facility is not located in an area designated nonattainment. Also, by continuing to comply with the facility wide emissions limitations, the potential emissions increase from any new sources or relocated existing sources will not exceed 100 tons per year after controls for any criteria pollutant. Therefore none of the changes will be considered a Type II action requiring an environmental assessment. Finally, by continuing to comply with the facility wide emission limitations, the facility would not become a major source for Part 70 purposes for either volatile organic compound or hazardous air pollutant emissions. Requirement I.A.5.a.(1)(g) of this permit requires that any changes that result in potential facility wide emissions of particulate matter, sulfur dioxide, nitrogen oxide or carbon monoxide emissions exceeding 100 tons per year follow permit issuance requirements of chs. NR 406 and NR 407, Wis. Adm. Code.

- (2) *Alternate Scenario #2:* The permittee may initially operate new process equipment prior to obtaining a construction permit provided the permittee submits a complete construction and operation permit application as required by the conditions of I.A.5.a. and the following conditions are met: [s. 299.80(2)(h) and (4)(b), Wis. Stats.]

(a) The permittee shall submit two copies of the following information to the Department of Natural Resources, La Crosse Area Office, 3550 Mormon Coulee Road, Room 104, La Crosse, WI, 54601 **OR** other location specified by the Department, 14 calendar days prior to the date of initial operation:

- (i) Information identifying all applicable requirements from the Wisconsin Statutes, Wisconsin Administrative Code, and federal Clean Air Act for the proposed equipment;
- (ii) A quantification the air pollution emissions that would result from the proposed project;
- (iii) A computer dispersion modeling analysis showing the National Ambient Air Quality Standards will be protected if the proposed project results in an increase in potential particulate matter, sulfur dioxide, nitrogen oxide, and/or carbon monoxide emissions.
- (iv) A computer dispersion modeling analysis showing the Acceptable Ambient Concentrations will be protected if the proposed project results in an increase in emissions of any hazardous air pollutant listed in ch. NR 445, Wis. Adm. Code so that the resulting facility total emissions of the hazardous air pollutant are above the corresponding Table Value(s) **OR** results in the emission of any hazardous air pollutant listed in ch. NR 445, Wis. Adm. Code that was not previously emitted, at a rate greater than its corresponding Table Value(s); and
- (v) An analysis showing the proposed project will not cause the total facility wide potential emissions of particulate matter, sulfur dioxide, nitrogen oxides or carbon monoxide to exceed 100 tons per year. Any proposed new or relocated source that will result in the facility wide potential emissions of any one of these pollutants exceeding 100 tons per year is not eligible for this waiver. If the facility wide potential emissions of any one of the pollutants would be greater than 100 tons per year as the result of a proposed project, the permittee shall comply with the construction permit requirements outlined in ch. NR 406, Wis. Adm. Code and the significant operation permit revision requirements of s. NR 407.13, Wis. Adm. Code.<sup>3</sup> [ss. 299.80(10) and (11)(b), Wis. Stats.]

(b) The Department has 14 calendar days from the date that all the information outlined in (a) is received to request additional information or object to the proposed project. If the Department requests additional information during the original 14 calendar day period the Department shall have an additional 7 calendar days from the date of receipt of the information to request additional information or object to the proposed project. Under no scenario shall the Department have less than 14 days to review original submittal. If the Department does not respond within 14 calendar days from the date that all the information outlined in (a) is submitted, or within 7 days from the date that any additional information requested by the Department is submitted, whichever is later, the permittee may commence initial operation of the proposed equipment. The Department may provide written approval to commence initial operation of the proposed equipment prior to the end of the 14 calendar day period. If this is the case the permittee may commence initial operation upon receipt of this written approval. [ss. 299.80(2)(h) and (11)(b), Wis. Stats.]

- (3) *Alternate Scenario #3:* The permittee may initially operate new process equipment prior to obtaining a construction permit provided the permittee submits a complete construction and operation permit application as required by the conditions of I.A.5.a. and the following conditions are met: [s. 299.80(2)(h) and (4)(b), Wis. Stats.]

(a) The Department provides written approval to commence initial operation of the proposed equipment. This written approval shall only be provided after the Department completes an air quality dispersion modeling analysis to ensure that the national ambient air quality standards and acceptable ambient concentrations will be protected while the proposed equipment is operating; [s. NR 406.09, Wis. Adm. Code]

---

<sup>3</sup> This requirement is necessary because if the potential emissions of particulate matter, sulfur dioxide, nitrogen oxide or carbon monoxide emissions exceeds 100 tons the facility would be considered a major source for Part 70 purposes and would be required to obtain either a Part 70 source permit or a synthetic minor, non-Part 70 source permit containing conditions that limit the potential emissions of all criteria pollutants to less than 100 tons per year.

(b) The permittee shall comply with any specific conditions included in the Department's written approval to commence initial operation;

- (4) The permittee shall continue to comply with all the requirements of Part I.A. of this permit so long as the cooperative agreement is in affect.<sup>4</sup> [s. 299.80(2)(h) and (4)(b), Wis. Stats.]
- (5) Nothing in this section or in any Cooperative Agreement between the Department and the permittee shall be construed as a guarantee that the Department will issue an air pollution control construction and operation permit for a proposed project. The decision on whether to approve a permit application will be made according to the requirements of chapters NR 400 through NR 499, Wis. Adm. Code and s. 285.60 through 285.69, Wis. Stats. If the Department denies a permit application pursuant to ss 285.61 through 285.64, Wis. Stats. all costs and risks associated with installing and operating the proposed equipment shall be incurred solely by the permittee. In the event that the construction and operation permit application for the proposed project is denied, the permittee shall cease construction and/or operation of the equipment in question immediately.

2. Item: Waiver from individual process line LACT (latest available control technique) requirements for controlling volatile organic compound emissions.

Previous Requirements to be Superseded by the Cooperative Agreement [source of the requirement]:

Requirement to control volatile organic compound emissions from process lines on which construction or modification commenced on or after August 1, 1979, and which are not subject to emission limitations listed elsewhere in chs. NR 419 to 423, Wis. Adm. Code by at least 85 percent OR where 85 percent control has been demonstrated to be technologically infeasible, to control volatile organic compounds using the latest available control techniques and operating practices demonstration best current technology, as approved by the Department. [s. NR 424.03(2)(b) and (c), Wis. Adm. Code]

**Galesville - LACT Requirements from Existing Permits**

Process P01:	Permit 98-RV-042	Condition I.I. Applicable Limitation for VOCs Condition I.I.2.a.
	Permit 97-RV-160-R1	Condition I.I. Applicable Limitation for VOCs Condition I.I.2.a.
	Permit 97-RV-160	Condition I.I. Applicable Limitation for VOCs Condition I.I.2.a.
	Alteration of 84-IRS-032 dated 5/27/87 for:	PSM-G-01, PSM-G-02, PSM-G-03, PSM-G-03, PSM-WS-79, PSM-G-10, PSM-G-11, PSM-G-12, PSM-G-13, PSM-G-14
	Permit 84-IRS-032A dated 5/3/89	Condition I.A. Specific Emission Limitations for VOCs
	Permit 84-IRS dated 11/9/84	Condition I.A.30. Emission Limitation of OC Condition I.A.43. Emission Limitation of OC Condition I.A.49. Emission Limitation of OC
Process P28:	Permit 84-IRS-032 dated 12/20/89	Condition I.A.2. Specific Emission Limitation for VOCs

---

<sup>4</sup> By continuing to comply with the facility wide emission limitations outlined in Part I.A. the net emissions increase from any new sources or relocation of any existing sources from other facilities, will not exceed the major stationary source levels of s. NR 405.02(22)(a), Wis. Adm. Code triggering Prevention of Significant Deterioration (PSD) Requirements. The existing facility potential emissions of all criteria pollutants is less than 250 tons per year and the facility is not included in the source categories listed in s. NR 405.07(4), Wis. Adm. Code, therefore the existing facility is a synthetic minor source for PSD purposes. Note: This facility is not located in an area designated nonattainment. Also, by continuing to comply with the facility wide emissions limitations, the potential emissions increase from any new sources or relocated existing sources will not exceed 100 tons per year after controls for any criteria pollutant. Therefore none of the changes will be considered a Type II action requiring an environmental assessment. Finally, by continuing to comply with the facility wide emission limitations, the facility would not become a major source for Part 70 purposes for either volatile organic compound or hazardous air pollutant emissions. Requirement I.A.5.a.(1)(g) of this permit requires that any changes that result in potential facility wide emissions of particulate matter, sulfur dioxide, nitrogen oxide or carbon monoxide emissions exceeding 100 tons per year follow permit issuance requirements of chs. NR 406 and NR 407, Wis. Adm. Code.

Proposed Requirement Under Cooperative Agreement: Total volatile organic compound emissions from the Galesville facility may not exceed 85 tons per year averaged over each 12 consecutive month period.

3. Item: Monthly rather than daily record keeping requirements.

Previous Requirements to be Superseded by the Cooperative Agreement [source of requirement]: The following permit conditions require Northern Engraving to keep daily records:

**Galesville - Daily Record Keeping Requirements from Existing Permits:**

Permit 98-RV-042      Condition I.I.3.a.  
Permit 97-RV-160-R1      Condition I.I.3.a.  
Permit 97-RV-160      Condition I.I.4.a.

Proposed Requirement Under Cooperative Agreement: To demonstrate compliance status with the facility wide emission limitations for volatile organic compound and hazardous air pollutants, Northern Engraving would be required to keep monthly records of VOC emissions as follows:

**a. Compliance Demonstration Methods for VOCs:**

- (1) Each month the permittee shall calculate the total volatile organic compound emissions from the facility as follows:

$$E = (1 \text{ ton}/2000 \text{ lbs}) \times \{[(U_1 \times W_1 \times C_1) + (U_2 \times W_2 \times C_2) + \dots + (U_n \times W_n \times C_n)] - [(S_1 \times P_1) + (S_2 \times P_2) + \dots + (S_m \times P_m)]\}$$

where:

E is the monthly VOC emissions (tons/month);

U is the monthly usage of each ink, coating, solvent, or other VOC containing material used during the month (gallons/month);

W is the density of each ink, coating, solvent, or other VOC containing material used during the month (pounds/gallon)

C is the VOC content of each ink, coating, solvent, or other VOC containing material used during the month expressed as a weight fraction (i.e. if a material is 25% VOC by weight C would be 0.25);

n identifies each ink, coating, solvent or other VOC containing material used during the month;

S is the amount of each spent ink, coating, solvent or other VOC containing material recovered and shipped off site each month (lbs/month);

P is the VOC content of each spent ink, coating, solvent or other VOC containing material recovered and shipped off site each month expressed as a weight fraction (i.e. if a spent material is 25% VOC by weight P would be 0.25);

m identifies each spent ink, coating, solvent or other VOC containing material recovered and shipped off site during the month.

[s. NR 407.09(4)(a)1., Wis. Adm. Code]

- (2) To demonstrate compliance with the facility wide volatile organic compound emission limitation of 85 tons per year, the permittee shall calculate the total volatile organic compound emissions from the facility, averaged over each 12 consecutive month period by summing the monthly volatile organic compound emissions as calculated in a.(1) above for each consecutive 12 month period. This calculation shall be performed within fifteen calendar days of the end of each month for the previous 12 consecutive month period. [s. NR 407.09(4)(a)1., Wis. Adm. Code]
- (3) The permittee shall use U.S. EPA Method 24, or coating manufacturer's formulation data to determine the VOC content ( $C_n$ ) and the density ( $W_n$ ) of the of the inks, coatings, solvents or other VOC containing materials used. In case of an inconsistency between the Method 24 results and the formulation data, the Method 24 results will govern. [s. NR 439.04(1)(d), Wis. Adm. Code]
- (4) The permittee shall analyze the spent ink, coating, solvent and other VOC containing material

recovered and shipped off site to determine the VOC content (P) no less than: (a) each time there is a change to materials or process operations that may affect the waste stream; or (b) annually, which ever is most frequent. [s. NR 439.04(1)(d), Wis. Adm. Code]

**b. Record Keeping and Monitoring Requirements for VOCs:**

- (1) The permittee shall keep records of the following for each ink, coating, solvent, or other VOC containing material used at the facility:
- (a) A unique name or identification number; and
  - (b) The VOC content, expressed as a weight fraction ( $C_n$ ).
- [s. NR 439.04(1)(d), Wis. Adm. Code]
- (2) The permittee shall keep monthly records of:
- (a) The amount of each ink, coating, solvent, or other VOC containing material used in gallons per month ( $U_n$ );
  - (b) The density of each ink, coating, solvent, or other VOC containing material used in pounds per gallon ( $W_n$ );
  - (c) The amount of spent ink, coating, solvent, or other VOC containing material recovered and shipped off site in pounds per month ( $S_m$ );
  - (d) The VOC content of each spent ink, coating, solvent or other VOC containing material recovered and shipped off site, expressed as a weight fraction ( $P_m$ ).
  - (e) The total monthly VOC emissions from the facility in tons per month (E), as calculated in a.(1); and
  - (f) The total VOC emissions from the facility in tons per year as calculated in a.(2).
- [s. NR 439.04(1)(d), Wis. Adm. Code]

**c. Compliance Demonstration Methods for HAPs:**

- (1) Each month the permittee shall calculate the total emissions of each hazardous air pollutant from the facility regulated by the Clean Air Act as follows:<sup>5</sup>

$$E_x = (1 \text{ ton}/2000 \text{ lbs}) \times \{[(U_1 \times W_1 \times H_1) + (U_2 \times W_2 \times H_2) + \dots + (U_n \times W_n \times H_n)] - [(S_1 \times I_1) + (S_2 \times I_2) + \dots + (S_m \times I_m)]\}$$

where:

$E_x$  is the monthly emissions of each hazardous air pollutant regulated by the Clean Air Act (tons/month);

x identifies each HAP emitted from the facility

U is the monthly usage of each ink, coating, solvent, or other HAP containing material used during the month (gallons/month);

W is the density of each ink, coating, solvent, or other HAP containing material used during the month (pounds/gallon)

H is the HAP content of each ink, coating, solvent, or other HAP containing material used during the month expressed as a weight fraction (i.e. if a material is 25% HAP by weight H would be 0.25);

n identifies each ink, coating, solvent or other HAP containing material used during the month;

S is the amount of each spent ink, coating, solvent or other HAP containing material recovered and shipped off site each month (lbs/month);

I is the HAP content of each spent ink, coating, solvent or other HAP containing material recovered and shipped off site each month expressed as a weight fraction (i.e. if a spent material is 25% HAP by weight I would be 0.25);

m identifies each spent ink, coating, solvent or other HAP containing material recovered and shipped off site during the month.

[s. NR 407.09(4)(a)1., Wis. Adm. Code]

---

<sup>5</sup> This calculation shall be performed for each hazardous air pollutant regulated by the Clean Air Act that is emitted from the facility.



- (2) To demonstrate compliance with the facility wide limitation on each hazardous air pollutant emissions of 8 tons per year, the permittee shall calculate the emissions of each hazardous air pollutant regulated by the Clean Air Act, averaged over each 12 consecutive month period by summing the monthly emissions of each hazardous air pollutant regulated by the Clean Air Act as calculated in c.(1) for each consecutive 12 month period. This calculation shall be performed within fifteen calendar days of the end of each month for the previous 12 consecutive month period. [s. NR 407.09(4)(a)1., Wis. Adm. Code]

- (3) Each month the permittee shall calculate the total emissions of hazardous air pollutants regulated by the Clean Air Act as follows:

$$E_{\text{hap}} = \Sigma E_x$$

where:

$E_{\text{hap}}$  is the monthly total emissions of all hazardous air pollutants regulated by the Clean Air Act that are emitted by the facility (tons/month);

$E_x$  is the monthly emissions of each hazardous air pollutant regulated by the Clean Air Act (tons/month) as calculated in c.(1);

x identifies each HAP emitted from the facility.

[s. NR 407.09(4)(a)1., Wis. Adm. Code]

- (4) To demonstrate compliance with the facility wide limitation on the total hazardous air pollutants emitted from the facility of 20 tons per year, the permittee shall calculate the total emissions of all hazardous air pollutants regulated by the Clean Air Act, averaged over each 12 consecutive month period by summing the monthly emissions of all hazardous air pollutants regulated by the Clean Air Act as calculated in c.(3) for each consecutive 12 month period. This calculation shall be performed within fifteen calendar days of the end of each month for the previous 12 consecutive month period. [s. NR 407.09(4)(a)1., Wis. Adm. Code]
- (5) The permittee shall use coating manufacturer's formulation data to determine the HAP content ( $H_n$ ) of the of the inks, coatings, solvents or other HAP containing materials used. [s. NR 439.04(1)(d), Wis. Adm. Code]
- (6) The permittee shall analyze the spent ink, coating, solvent and other HAP containing material recovered and shipped off site to determine the HAP content (H) no less than: (a) each time there is a change to materials or process operations that may affect the waste stream; or (b) annually, which ever is most frequent. [s. NR 439.04(1)(d), Wis. Adm. Code]

**d. Record Keeping and Monitoring Requirements for HAPs:**

- (1) The permittee shall keep records of the following for each ink, coating, solvent, or other HAP containing material used at the facility:
- (a) A unique name or identification number; and
  - (b) The weight fraction of each HAP contained in the material ( $H_n$ ).
- [s. NR 439.04(1)(d), Wis. Adm. Code]
- (2) The permittee shall keep monthly records of:
- (a) The amount of each ink, coating, solvent, or other HAP containing material used in gallons per month ( $U_n$ );
  - (b) The density of each ink, coating, solvent, or other HAP containing material used in pounds per gallon ( $W_n$ );
  - (c) The amount of spent ink, coating, solvent, or other HAP containing material recovered and shipped off site in pounds per month ( $S_m$ );
  - (d) The weight fraction of each HAP contained in each spent ink, coating, solvent or other HAP containing material recovered and shipped off site, expressed as a weight fraction ( $I_m$ );
  - (e) The facility total monthly emissions of each HAP in tons per month ( $E_x$ ), as calculated in

- c.(1);
  - (f) The total monthly HAP emissions from the facility in tons per month ( $E_{hap}$ ), as calculated in c.(3);
  - (g) The facility total emissions of each HAP in tons per year as calculated in c.(2).
  - (h) The total HAP emissions from the facility in tons per year as calculated in c.(4).
- [s. NR 439.04(1)(d), Wis. Adm. Code]

The proposed agreement would allow a variance from the requirement to obtain a construction permit prior to constructing, modifying, relocating and initially operating process equipment provided the permittee meets the conditions listed under item 1. above. The permittee would be required to submit a complete construction and operation permit application, an explanation of how they have informed their interested persons group, and the application fee prior to commencing construction. The permittee would assume the risk of constructing without a permit. In order to operate any new equipment the permittee would be required to comply with one of three alternate scenarios. Under the first scenario the permittee would not be allowed to operate the new equipment until the Department issues a construction permit. Under the second scenario the permittee would be required to submit a detailed review of the proposed project including a detailed modeling analysis, complete permit application and determination that the proposed equipment will meet applicable limitations. The Department would then have 14 calendar days from the date of the permittee's submittal to object to the proposal or request additional information. Under the third scenario the permittee would be allowed to initially operate only after receiving a written approval from the Department. The Department would only issue this approval after the air quality dispersion modeling analysis is completed and conditions are developed to ensure the national ambient air quality standards and the acceptable ambient concentrations are protected. Prior approval to construct or initially operate would not constitute final Department approval of any permit application. The Department will review the application and make a determination to approve or disapprove the permit application following the procedures of ch. 285, Wis. Stats and chs. NR 400 through 499, Wis. Adm. Code. If the Department does not approve the application, the permittee would be required to discontinue construction and initial operation at their own expense.

This variance from the requirement to obtain a construction permit prior to commencing construction and initial operation gives the permittee greater flexibility than otherwise allowed under chs. 280 to 295, Wis. Stats. and the rules promulgated under those chapters, pursuant to s. 299.80(2)(h), Wis. Stats. Due to the nature of the permittee's business they need to be responsive to their customer's demands in a shorter time frame than allowed by the current construction permit process. To be able to operate without a permit the permittee would either wait for the Department to issue a construction permit, complete an air quality dispersion modeling analysis and provide written approval, or take on additional responsibilities. The additional responsibility would include systematically assessing the pollution that the proposed project would cause and ensuring that they would comply with all applicable air pollution requirements. Because the permittee would be required to comply with a facility wide emissions cap even with the addition of any new equipment there would be no resulting increase in their potential facility emissions. The added flexibility provided by this variance would reduce the time and money spent not only by the permittee but also by the Department on administrative tasks that do not result in benefits to the environment, pursuant to s. 299.80(2)(i), Wis. Stats. Because of the fluctuating nature of their business the permittee currently submits a number of construction permit application each year in attempt to predict their customers' needs. The Department processes these applications and issues construction permits. The majority of the time, the permittee finds that the equipment they've permitted is not the equipment necessary to meet customer demands and they do not install it. The flexibility to construct and initially operate equipment in a shorter time frame would eliminate processing unnecessary permits saving both the permittee and the Department time and money and allowing both parties to focus on processing the permits that are required.

The proposed agreement would allow a variance from the LACT requirements for process P01 as described in item 2 above. These LACT requirements were previously determined by the Department as part of the review of the air pollution control permits listed above and are:

Process P01: the use of non-UV inks and adhesives with a maximum VOC content of 6.5 pounds per gallon as applied, and the use of UV inks and watermarks with a maximum VOC content of 1.0 pounds per gallon as applied.

As shown in the Facility Emissions section, the potential volatile organic compound emissions that could result if LACT were the only restriction applied to the facility is 1040.37 tons per year. The permittee has elected to take

additional restrictions as part of their operation permit so the facility would be considered a synthetic minor, non-Part 70 source. Under this restriction the potential volatile organic compound emissions would be 99 tons per year. Under the Cooperative Agreement the permittee has proposed to further limit their potential volatile organic emissions to not more than 85 tons per year. This reduction in the overall level of volatile organic compound emissions satisfies the requirements that any variance granted under a Cooperative Agreement promote the reduction in overall levels of pollution to below the levels required under chs. 280 to 295, Wis. Stats., pursuant to s. 299.80(4)(b), Wis. Stats. Setting a facility wide volatile organic compound emission limitation rather than a process specific limitation encourages the permittee to implement source specific efficient and cost-effective pollution reduction strategies while providing the same level of protection of public health and the environment, pursuant to ss. 299.80(2)(a) and (c), Wis. Stats.

While the applicable LACT requirements are in terms of the pounds of volatile organic compounds in a gallon of material, the proposed variance does not limit the VOC content of the materials used at the plant, but limits the overall VOC emissions as shown above. Air pollution limitations are intended to protect National Ambient Air Quality Standards (NAAQSs) established by the U.S. Environmental Protection Agency. Currently there are no NAAQSs for VOC. Volatile organic compound emissions are regulated because they react with nitrogen oxides in the atmosphere on hot sunny days to form ozone, more commonly known as smog. If present at high enough concentrations, surface level ozone can potentially impact public health and the environment. The U.S. EPA has established NAAQSs for ozone. Because of the way that ozone is formed, it is generally a regional problem where many sources of VOC and nitrogen oxide emissions contribute to its formation. Some large urban areas including southeastern Wisconsin are classified as ozone nonattainment areas. None of the counties in the western part of Wisconsin including La Crosse, Trempealeau, and Monroe Counties are classified as nonattainment areas for ozone.

To demonstrate that their volatile organic compound emissions remain below 85 tons per year, the permittee has proposed an alternate record keeping method to reduce their administrative burden. See item 3 above. The permittee has proposed to keep monthly records of the VOC containing materials used at their facility to determine their overall facility emissions. These types of records should demonstrate compliance status with the facility wide emission limitation of 85 tons of VOC per year and reduce the administrative burden on the permittee and the Department, pursuant to s. 299.80(4)(b), Wis. Stats.

In addition to a more restrictive limitation on VOCs, the permittee has elected a more restrictive limitation on hazardous air pollutant emissions. To be a minor source of hazardous air pollutants, a facility's potential emissions of each hazardous air pollutant regulated by the Clean Air Act must be less than 10 tons per year and the potential emissions of all hazardous air pollutants regulated by the Clean Air Act combined must be less than 25 tons per year. The permittee has elected to take further restrictions and proposes to limit the potential emissions of each hazardous air pollutant regulated by the Clean Air Act to less than 8 tons per year and the potential emissions of all hazardous air pollutants regulated by the Clean Air Act combined to less than 20 tons per year promoting the reduction in the overall levels of pollution to below the levels required under chs. 280 to 295, Wis. Stats., pursuant to s. 299.80(4)(b), Wis. Stats.

Please refer to the Cooperative Agreement and its supporting documentation for more information regarding the variances granted under that pilot program.

**Compliance Demonstration Under Cooperative Agreement:** For specific compliance demonstration requirements, please refer to the Draft Operation Permit. To demonstrate compliance with the facility wide limitation on VOC emissions, the permittee would be required to calculate and record the total VOC emissions from the facility each month and calculate and record the monthly VOC emissions averaged over each 12 consecutive month period. The permittee would be required to use U.S. EPA Method 24, or manufacturer's formulation data to determine the VOC content and density of the materials used. The permittee would be required to analyze the spent ink, coating, solvent and other VOC containing material recovered and shipped off site to determine the VOC content no less than each time there is a change to materials or process operations that may affect the waste stream or annually, whichever is most frequent. To demonstrate compliance with the facility wide limitation on emissions of each Clean Air Act HAP, the permittee would be required to calculate and record the facility total emissions of each Clean Air Act HAP each month and calculate and record the monthly emissions of each Clean Air Act HAP averaged over each 12 consecutive month period. To demonstrate compliance with the facility wide limitation on total emissions of all Clean Air Act HAPs, the permittee would be required to calculate and record the facility total emissions of all Clean Air Act HAPs each month and calculate and record the monthly emissions of all Clean Air

Act HAPs averaged over each 12 consecutive month period. The permittee would be required to use manufacturer's formulation data to determine the HAP content and density of the materials used. The permittee would be required to analyze the spent ink, coating, solvent and other HAP containing material recovered and shipped off site to determine the HAP content no less than each time there is a change to materials or process operations that may affect the waste stream or annually, whichever is most frequent. To demonstrate compliance with particulate matter and visible emission limitations the permittee would be required to retain plans and specifications of each non-electric curing oven that indicate they are designed to only burn natural gas and propane. This is an adequate compliance demonstration method because the maximum theoretical emissions while firing these fuels are less than the allowable particulate matter emission limits. Additionally, because natural gas and propane are clean burning fuels it is not expected that the visible emission limitations would be exceeded while firing them.

#### **DETERMINATION**

The preliminary determination of the DNR Air Management Program is that this project when constructed or modified and operated consistent with the application and subsequent information submitted will be able to meet the emission limits and conditions included in the attached Draft Permit. A final decision regarding emission limits and conditions will be made after the Department has reviewed and evaluated all comments received during the comment period. The proposed emission limits and other proposed conditions in the Draft Permit are written in the same form that they will appear in the construction permit and, where applicable, the operation permit. These proposed conditions may be changed as a result of public comments or further evaluation by the Department.

PERMIT FEE CALCULATION		
BASIC FEES:		
1.	Construction or replacement of a PSD or NAA minor source or the PSD or NAA minor modification of a Part 70 minor source. (\$2,300)	\$2,300
2.	PSD or NAA minor modification of a Part 70 major source (\$4,400)	
3.	PSD or NAA major modification of an existing PSD or NAA major source where the major modification is not a PSD or NAA major source by itself (\$8,000)	
4.	Construction of a PSD or NAA major source, or any modification that constitutes a PSD or NAA major source by itself. (\$12,000)	
5.	Revision of a valid construction permit. (\$1,100)	
ADDITIONAL FEES:		
1.	The permit application required the review and analysis of two or more basic emissions units. (\$400 per basic emission unit)	
2.	The permit application is for a nonattainment area major source requiring an analysis of alternatives. (\$1,350)	
3.	The permit application is for a direct source which requires an emission offset under ch. NR 408, or the determination of a net emissions increase under ch. NR 405.	

	(\$3,350).	
4.	The permit application is for a source which requires a case-by-case BACT, MACT or LAER determination. This excludes ch. NR 445 BACT or LAER determinations. (\$2,700 per BACT, MACT or LAER determination)	
5.	The permit application is for a PSD or NAA minor source or minor modification to a major PSD or NAA source whose projected air quality impact requires a detailed air quality modeling analysis. (\$700)	
6.	The permit application is for any source which is not a PSD or NAA minor source or minor modification to a PSD or NAA major source whose project air quality impact requires a detailed air quality analysis. (\$3,200)	
7.	The permit application is for a source which may emit a toxic or hazardous substance listed in s. NR 406.04(2)(f) or chs. NR 446 to 484. (\$650)	
8.	The permit application is for a source which requires a case-by-case ch. NR 445 BACT or LAER determination. A single determination may address multiple air contaminants. (\$1,350 per BACT or LAER determination)	
9.	The permit application is for a source which requires a stack test. (\$1,350 for a single air contaminant test plus \$950 for each additional air contaminant, not to exceed \$4,200)	
10.	The permit application is for a source which requires an environmental assessment under ch. NR 150. (\$1050)	
11.	A public hearing on the application is held at the request of the permit applicant or its agent. (\$950).	
12.	The permit application is for a source which requires an emission limit determination under s. NR 424.03(2)(c), Wis. Adm. Code. (\$400 per basic emissions unit)	\$ 400
13.	The application is for a source which requires specific permit conditions to limit the facility potential to emit in order to make the source or modification a PSD, NAA or Part 70 minor source or a PSD or NAA minor modification. (\$2,150)	
14.	The application for a medical waste incinerator which requires review of a needs and siting analysis. (\$2,650)	
15.	The application is for a source not reviewed under ch. NR 405 or 408, Wis. Adm. Code, where the applicant requested in writing and received the permit in 50 days or less. (\$2,650)	
16.	The application for a source which is subject to review under ch. NR 405 or 408 where the applicant requested in writing and received the permit in 60 days or less.	

	(\$4,000)	
17.	The application is for a source which is subject to review under ch. NR 405 or 408 where the applicant requested in writing and received the permit in 61 to 90 days or less. (\$2,650)	
	TOTAL FEE	\$ 2,700
	CREDIT(S)	
1.	The applicant publishes the newspaper notice (\$150)	(\$150)
2.	The initial fee submitted with the application (\$1350)	(\$1350)
	TOTAL AMOUNT DUE	\$ 1,200

## Preamble

An Asterisk "\*" throughout this document denotes legal authority, limitations and conditions which are not federally enforceable.

### Concurrent Permit Actions Performed as Part of the Review and Issuance of Permit 662008930-F02

Construction Permits Issued in Conjunction with Permit 662008930-F02 under ch. NR 406, Wis. Adm. Code: 02-MEC-625

### Stack and Process Index

**Stack S01, Process P01 - 11 Screening Lines**

**Stack S03, Process P03 - Miscellaneous Facility Wide Cleanup**

**Stack S27, Process P27 - Towel Dryer**

**Stack S28, P28 - Batch Screen Cleaning/Reclaiming Machine with In-line Distillation**

**Permit Shield** Unless precluded by the Administrator of the USEPA, compliance with all emission limitations in this operation permit is considered to be compliance with all emission limitations established under ss. 285.01 to 285.87, Wis. Stats., and emission limitations under the federal clean air act, that are applicable to the source if the permit includes the applicable limitation or if the Department determines that the emission limitations do not apply. The following emission limitations were reviewed in the analysis and preliminary determination and were determined not to apply to this stationary source:

**Process P03:** Because cleanup is performed using a wipe cleaning operation and the facility is located outside of Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha counties, it is exempt from the requirements of s. NR 423.03, Wis. Adm. Code, pursuant to s. NR 423.03(2)(g)1., Wis. Adm. Code. The cleanup solvent use is subject to general emission limitations for volatile organic compounds outline in s. NR 419.03, Wis. Adm. Code which would be included in Part II of any operation permit issued by the Department.

**Facility:** Emissions from firing natural gas and propane, which are group I virgin fossil fuels, in the ovens associated with P01 are exempt from ch. NR 445, Wis. Adm. Code requirements, pursuant to ss. NR 445.04(1)(c)1., (3)(c)1, (4)(c)1., and (4r)(b)1. and ss. NR 445.05(1)(c)1., (3)(c)1, (4)(c)1., and (4r)(b)1., Wis. Adm. Code.

**Part I** The headings for the areas in the permit are defined below. The legal authority for these limitations or methods follows them in [brackets].

Pollutant -- This area will note which pollutant is being regulated by the permit.

Limitations -- This area will list all applicable emission limitations that apply to the source, including case-by-case limitations such as Latest Available Control Techniques (LACT), Best Available Control Technology (BACT), or Lowest Achievable Emission Rate (LAER). It will also list any voluntary restrictions on hours of operation, raw material use, or production rate requested by the permittee to limit potential to emit.

Compliance Demonstration -- The compliance demonstration methods outlined in this area may be used to demonstrate compliance the associated emission limit or work practice standard listed under the corresponding *Limitations* area. The compliance demonstration area contains limits on parameters or other mechanisms that will be monitored periodically to insure compliance with the limitations. The requirement to test as well as initial and periodic test schedules, if testing is required, will be stated here. Notwithstanding the compliance determination methods which the owner or operator of a sources is authorized to use under ch. NR 439, Wis. Adm. Code, the Department may use any relevant information or appropriate method to determine a source's compliance with applicable emission limitations.

Reference Test Methods, Recordkeeping, and Monitoring Requirements -- Specific USEPA Reference test methods or other approved test methods will be contained in this area and are the methods that must be used whenever testing is required. A reference test method will be listed even if no testing is immediately required. Also included in this area are any recordkeeping requirements and their frequency and reporting requirements. Accuracy of monitoring equipment and frequency of monitoring shall meet, at a minimum, the requirements of ss. NR 439.055(3) and (4), Wis. Adm. Code, as specified in Part II of this permit.

Condition Type -- This column will specify other conditions that are applicable to the entire facility that may not be tied to one specific pollutant.

Conditions -- Specific conditions usually applicable to the entire facility or compliance requirements.

Compliance Demonstration -- This area contains monitoring and testing requirements and methods to demonstrate compliance with the conditions.

PART II -- This section contains the general limitations that the permittee must abide by. These requirements are standard for most sources of air pollutants so they are included in this section with every permit.



DRAFT AIR POLLUTION CONTROL CONSTRUCTION PERMIT  
DRAFT AIR POLLUTION CONTROL OPERATION PERMIT

EI FACILITY NO. 662008930

PERMIT NO. 02-MEC-625 and 662008930-F02

TYPE: Significant Revision of Synthetic Minor, Non-Part 70 Source Operation Permit

THIS CONSTRUCTION PERMIT EXPIRES EIGHTEEN (18) MONTHS FROM THE DATE OF ISSUANCE.

In compliance with the provisions of Chapter 285 and section 299.80 Wis. Stats., and Chapters NR 400 to NR 499, Wis. Adm. Code,

Name of Source:	Northern Engraving Corporation
Street Address:	1200 W. Gale Avenue. Galesville, Trempealeau County, Wisconsin
Responsible Official, & Title:	Bruce Corning, VP Management Systems

is authorized to operate a plastic automotive trim and nameplate manufacturing facility in conformity with the conditions herein.

**THIS OPERATION PERMIT EXPIRES APRIL 26, 2007.**

RENEWAL APPLICATION MUST BE SUBMITTED AT LEAST 12 MONTHS, BUT NOT MORE THAN 18 MONTHS, PRIOR TO THIS EXPIRATION DATE. [s. NR 407.09(1)(b)1., Wis. Adm. Code].

No permittee may continue operation of a source after the operation permit expires, unless the permittee submits a timely and complete application for renewal of the permit [s. 285.66(3), Wis. Stats. and NR 407.04(2), Wis. Adm. Code].

This authorization requires compliance by the permit holder with the emission limitations, monitoring requirements and other terms and conditions set forth in Parts I and II hereof.

Dated at Wisconsin Rapids, Wisconsin,\_\_\_\_\_.

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES  
For the Secretary

By \_\_\_\_\_  
Joseph E. Ancel, Southeast Team Supervisor  
West Central Region Air Program

**PART I**  
**SPECIFIC PERMIT CONDITIONS**

- A.** *Part I.A. of this operation permit is effective so long as the permittee is operating under a Cooperative Agreement with the Department as entered into under s. 299.80 Wis. Stats. If any such Cooperative Agreement expires or is revoked for any reason, Part I.A. of this operation permit is no longer effective and Part I.B. becomes the effective operation permit for the facility. If any such Cooperative Agreement expires or is revoked for any reason, the permittee shall comply with any delayed compliance deadlines and practical interim requirements established by the Department in a written revocation decision until the Department issues the approvals required under chs. 280 to 295, Wis. Stats, that were replaced by the above referenced Cooperative Agreement.*

**1. Volatile Organic Compound Emissions**

**a. Limitations:**

(1) The total volatile organic compound emissions from the facility may not exceed 85 tons for each 12 consecutive month period. [s. 299.80(4)(b), Wis. Stats and s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration Methods:**

(1) Each month the permittee shall calculate the total volatile organic compound emissions from the facility as follows:

$$E = (1 \text{ ton}/2000 \text{ lbs}) \times \{[(U_1 \times W_1 \times C_1) + (U_2 \times W_2 \times C_2) + \dots + (U_n \times W_n \times C_n)] - [(S_1 \times P_1) + (S_2 \times P_2) + \dots + (S_m \times P_m)]\}$$

where:

E is the monthly VOC emissions (tons/month);

U is the monthly usage of each ink, coating, solvent, or other VOC containing material used during the month (gallons/month);

W is the density of each ink, coating, solvent, or other VOC containing material used during the month (pounds/gallon)

C is the VOC content of each ink, coating, solvent, or other VOC containing material used during the month expressed as a weight fraction (i.e. if a material is 25% VOC by weight C would be 0.25);

n identifies each ink, coating, solvent or other VOC containing material used during the month;

S is the amount of each spent ink, coating, solvent or other VOC containing material recovered and shipped off site each month (gallons/month);

P is the VOC content of each spent ink, coating, solvent or other VOC containing material recovered and shipped off site each month in pounds per gallon;

m identifies each spent ink, coating, solvent or other VOC containing material recovered and shipped off site during the month.

[s. NR 407.09(4)(a)1., Wis. Adm. Code]

(2) To demonstrate compliance with condition I.A.1.a.(1), the permittee shall calculate the total volatile organic compound emissions from the facility over each 12 consecutive month period by summing the monthly volatile organic compound emissions as calculated in I.A.1.b.(1) for each consecutive 12 month period. This calculation shall be performed within twenty calendar days of the end of each month for the previous 12 consecutive month period. [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(3) The permittee shall use U.S. EPA Method 24, or coating manufacturer's formulation data to determine the VOC content ( $C_n$ ) and the density ( $W_n$ ) of the of the inks, coatings, solvents or other VOC containing materials used. In case of an inconsistency between the Method 24 results and the formulation data, the Method 24 results will govern. [s. NR 439.04(1)(d), Wis. Adm. Code]

(4) The permittee shall analyze the spent ink, coating, solvent and other VOC containing material recovered and shipped off site to determine the VOC content (P) no less than: (a) each time there is a substantial change to materials or process operations that may affect the characteristics of the waste stream; or (b) quarterly, which ever is most frequent. [s. NR 439.04(1)(d), Wis. Adm. Code]

**c. Record Keeping and Monitoring Requirements:**

(1) The permittee shall keep records of the following for each ink, coating, solvent, or other VOC containing material used at the facility:

- (a) A unique name or identification number; and
- (b) The VOC content, expressed as a weight fraction ( $C_n$ ).  
[s. NR 439.04(1)(d), Wis. Adm. Code]

(2) The permittee shall keep monthly records of:

- (a) The amount of each ink, coating, solvent, or other VOC containing material used in gallons per month ( $U_n$ );
- (b) The density of each ink, coating, solvent, or other VOC containing material used in pounds per gallon ( $W_n$ );
- (c) The amount of spent ink, coating, solvent, or other VOC containing material recovered and shipped off site in gallons per month ( $S_m$ );
- (d) The VOC content of each spent ink, coating, solvent or other VOC containing material recovered and shipped off site in pounds per gallon ( $P_m$ ).
- (e) The total monthly VOC emissions from the facility in tons per month (E), as calculated in I.A.1.b.(1); and
- (f) The total VOC emissions from the facility in tons per year as calculated in I.A.1.b.(2).  
[s. NR 439.04(1)(d), Wis. Adm. Code]

**d. Reference Test Methods:**

(1) Reference Test Method for Volatile Organic Compound Emissions: Whenever compliance emission testing is required, US EPA Method 18, 25, 25A or 25B shall be used to demonstrate compliance. [s. NR 439.06(3)(a), Wis. Adm. Code]

(2) Reference Test Method for Volatile Organic Compound Content: Whenever VOC content testing is required, US EPA Method 24 or 24A shall be used to determine the organic solvent content, the volume of solids, the weight of solids, the water content and the density of inks. [s. NR 439.06(3)(b), Wis. Adm. Code]

**2. Hazardous Air Pollutant Emissions**

**a. Limitations:**

(1) The emissions of each hazardous air pollutant regulated by the Clean Air Act shall be less than 8 tons for each 12 consecutive month period. [s. 299.80(4)(b), Wis. Stats.] [s. 285.65(7), Wis. Stats.]

(2) The total emissions of all hazardous air pollutants regulated by the Clean Air Act combined shall be less than 20 tons for each 12 consecutive month period. [s. 299.80(4)(b), Wis. Stats.] [s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration Methods:**

(1) Each month the permittee shall calculate the total emissions of each hazardous air pollutant from the facility regulated by the Clean Air Act as follows:<sup>6</sup>

$$E_x = (1 \text{ ton}/2000 \text{ lbs}) \times \{[(U_1 \times W_1 \times H_1) + (U_2 \times W_2 \times H_2) + \dots + (U_n \times W_n \times H_n)] - [(S_1 \times I_1) + (S_2 \times I_2) + \dots + (S_m \times I_m)]\}$$

where:

---

<sup>6</sup> This calculation shall be performed for each hazardous air pollutant regulated by the Clean Air Act that is emitted from the facility.

$E_x$  is the monthly emissions of each hazardous air pollutant regulated by the Clean Air Act (tons/month);

$x$  identifies each HAP emitted from the facility

$U$  is the monthly usage of each ink, coating, solvent, or other HAP containing material used during the month (gallons/month);

$W$  is the density of each ink, coating, solvent, or other HAP containing material used during the month (pounds/gallon)

$H$  is the HAP content of each ink, coating, solvent, or other HAP containing material used during the month expressed as a weight fraction (i.e. if a material is 25% HAP by weight  $H$  would be 0.25);

$n$  identifies each ink, coating, solvent or other HAP containing material used during the month;

$S$  is the amount of each spent ink, coating, solvent or other HAP containing material recovered and shipped off site each month (gallons/month);

$I$  is the HAP content of each spent ink, coating, solvent or other HAP containing material recovered and shipped off site each month in pounds per gallon;

$m$  identifies each spent ink, coating, solvent or other HAP containing material recovered and shipped off site during the month.

[s. NR 407.09(4)(a)1., Wis. Adm. Code]

(2) To demonstrate compliance with condition I.A.2.a.(1), the permittee shall calculate the emissions of each hazardous air pollutant regulated by the Clean Air Act over each 12 consecutive month period by summing the monthly emissions of each hazardous air pollutant regulated by the Clean Air Act as calculated in I.A.2.b.(1) for each consecutive 12 month period. This calculation shall be performed within twenty calendar days of the end of each month for the previous 12 consecutive month period. [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(3) Each month the permittee shall calculate the total emissions of hazardous air pollutants regulated by the Clean Air Act as follows:

$$E_{hap} = \sum E_x$$

where:

$E_{hap}$  is the monthly total emissions of all hazardous air pollutants regulated by the Clean Air Act that are emitted by the facility (tons/month);

$E_x$  is the monthly emissions of each hazardous air pollutant regulated by the Clean Air Act (tons/month) as calculated in I.A.2.b.(1);

$x$  identifies each HAP emitted from the facility.

[s. NR 407.09(4)(a)1., Wis. Adm. Code]

(4) To demonstrate compliance with condition I.A.2.a.(2), the permittee shall calculate the total emissions of all hazardous air pollutants regulated by the Clean Air Act over each 12 consecutive month period by summing the monthly emissions of all hazardous air pollutants regulated by the Clean Air Act as calculated in I.A.2.b.(3) for each consecutive 12 month period. This calculation shall be performed within twenty calendar days of the end of each month for the previous 12 consecutive month period. [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(5) The permittee shall use coating manufacturer's formulation data to determine the HAP content ( $H_n$ ) of the of the inks, coatings, solvents or other HAP containing materials used. [s. NR 439.04(1)(d), Wis. Adm. Code]

(6) The permittee shall analyze the spent ink, coating, solvent and other HAP containing material recovered and shipped off site to determine the HAP content ( $H$ ) no less than: (a) each time there is a substantial change to materials or process operations that may affect the characteristics of the waste stream; or (b) quarterly, which ever is most frequent. [s. NR 439.04(1)(d), Wis. Adm. Code]

**c. Record Keeping and Monitoring Requirements:**

(1) The permittee shall keep records of the following for each ink, coating, solvent, or other HAP containing material used at the facility:

(a) A unique name or identification number; and

(b) The weight fraction of each HAP contained in the material ( $H_n$ ).

[s. NR 439.04(1)(d), Wis. Adm. Code]

(2) The permittee shall keep monthly records of:

- (a) The amount of each ink, coating, solvent, or other HAP containing material used in gallons per month ( $U_n$ );
- (b) The density of each ink, coating, solvent, or other HAP containing material used in pounds per gallon ( $W_n$ );
- (c) The amount of spent ink, coating, solvent, or other HAP containing material recovered and shipped off site in gallons per month ( $S_m$ );
- (d) The amount of each HAP contained in each spent ink, coating, solvent or other HAP containing material recovered and shipped off site in pounds per gallon ( $I_m$ );
- (e) The facility total monthly emissions of each HAP in tons per month ( $E_x$ ), as calculated in I.A.2.b.(1);
- (f) The total monthly HAP emissions from the facility in tons per month ( $E_{nap}$ ), as calculated in I.A.2.b.(3);
- (g) The facility total emissions of each HAP in tons per year as calculated in I.A.2.b.(2).
- (h) The total HAP emissions from the facility in tons per year as calculated in I.A.2.b.(4).

[s. NR 439.04(1)(d), Wis. Adm. Code]

**d. Reference Test Methods:**

(1) Reference Test Method for Hazardous Air Pollutant Emissions: Whenever compliance emission testing is required, a method approved by the Department in writing shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]

**3. Particulate Matter Emissions**

**a. Limitations:**

(1) Particulate matter emissions from each stack exhausting non-electric drying ovens may not exceed 0.15 pounds per mmBtu of heat input to each stack. [s. NR 415.06(2)(a), Wis. Adm. Code]

**b. Compliance Demonstration Methods:**

(1) The permittee shall only fire natural gas and/or propane in each non-electric drying oven at the facility.<sup>7</sup> [ss. NR 407.09(1)(c)1.b., Wis. Adm. Code and 285.65(3) and 285.63(1)(a), Wis. Stats.]

**c. Record Keeping and Monitoring Requirements:**

(1) The permittee shall retain on site, plans and specifications that indicate each drying oven's fuel usage design capabilities.<sup>8</sup> [s. NR 439.04(1)(d), Wis. Adm. Code]

**d. Reference Test Methods:**

---

<sup>7</sup> Because the maximum theoretical emissions while firing these fuels are less than the allowable limit of 0.15 pounds per million Btu heat input, limiting the type of fuel used is adequate to demonstrate compliance with the particulate matter emission limit. Maximum theoretical particulate matter emissions were calculated using an emission factor of 7.6 pounds per million cubic feet of natural gas fired from AP-42, 5th edition, ch. 1.4.

<sup>8</sup> These plans and specifications are sufficient because each non-electric drying oven is designed to only burn natural gas and/or propane.

(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, US EPA Methods 5 and Method 202 shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]

#### 4. Visible Emissions

##### a. **Limitations:**

(1) The visible emissions from each of the stacks exhausting emissions units at the facility may not exceed 20% opacity [s. NR 431.05, Wis. Adm. Code]

##### b. **Compliance Demonstration Methods:**

(1) The permittee shall only fire natural gas and/or propane in each non-electric drying oven.<sup>9</sup> [ss. 285.65(3) and 285.63(1)(a), Wis. Stats.]

##### c. **Record Keeping and Monitoring Requirements:**

(1) The permittee shall retain on site, plans and specifications that indicate each drying oven's fuel usage design capabilities.<sup>10</sup> [s. NR 439.04(1)(d), Wis. Adm. Code]

##### d. **Reference Test Methods:**

(1) Reference Test Method for Visible Emissions: Whenever compliance emission testing is required, US EPA Method 9 shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

#### 5. Operational Flexibility

a. **New Equipment Construction and Modification:** The permittee may commence construction or modification (but not operation) of new process equipment prior to obtaining a construction permit, provided the following conditions are met. The following conditions do not apply if a proposed project is exempt from the requirement to obtain a construction permit, pursuant to s. NR 406.04, Wis. Adm. Code. [s. 299.80(2)(h) and (4)(b), Wis. Stats.]

(1) The permittee shall submit the following information to the Department of Natural Resources, La Crosse Area Office, 3550 Mormon Coulee Road, Room 104, La Crosse, WI, 54601 **OR** other location specified by the Department:

- (a) Two copies of a complete construction and operation permit application describing the proposed equipment;
  - (b) An application fee of \$1350 or other amount as required by s. NR 410.03(1)(d), Wis. Adm. Code; and
  - (c) Information describing how the interested persons group was notified of the proposed project.
- [ss. 299.80(10) and (11)(b), Wis. Stats.]

---

<sup>9</sup> It is not expected that the visible emission limitation of 20% opacity would be exceeded while firing these fuels. Therefore restricting the type of fuel used is adequate to ensure compliance with the emission limitation for fuel burning installations. The remaining stacks at the facility exhaust volatile organic compound emissions, and visible emissions are not expected from these other emission points.

<sup>10</sup> These plans and specifications are sufficient because each non-electric drying oven is designed to only burn natural gas and/or propane.

(2) The Department shall process the permit application in accordance with ss. 285.60 through 285.69, Wis. Stats and ss. NR 406 and NR 407, Wis. Adm. Code, however, the permittee need not wait for permit issuance to commence construction.

The Department shall process the permit application as both a construction permit and a significant revision to this operation permit and issue both permits simultaneously to reduce the administrative burden of issuing a construction permit that expires 18 months after issuance followed by an operation permit. The Department shall send an invoice outlining the fees required for processing the construction permit for the proposed project, including the fees for an expedited permit review authorized by s. NR 410.03(o), Wis. Adm. Code, less the \$1350 permit application fee. [ss. 299.80(2)(h), (4)(b), (10) and (11)(b), Wis. Stats.]

(3) The permittee shall pay the total amount of the fee invoice within 30 days of receipt.<sup>11</sup> [s. 299.80(10), Wis. Stats.]

(4) The permittee shall continue to comply with all the requirements of Part I.A. of this permit so long as the cooperative agreement is in affect.<sup>12</sup> [s. 299.80(2)(h) and (4)(b), Wis. Stats.]

(5) Nothing in this section or in any Cooperative Agreement between the Department and the permittee shall be construed as a guarantee that the Department will issue an air pollution control construction and operation permit for a proposed project.

The decision on whether to approve a permit application will be made according to the requirements of chapters NR 400 through NR 499, Wis. Adm. Code and s. 285.60 through 285.69, Wis. Stats. If the Department denies a permit application pursuant to ss 285.61 through 285.64, Wis. Stats. all costs and risks associated with installing and operating the proposed equipment shall be incurred solely by the permittee. In the event that the construction and operation permit application for the proposed project is denied, the permittee shall cease construction of the equipment in question immediately.

- b. New Equipment Operation:** The permittee may operate new process equipment, provided one of the following alternate scenarios are met. The following conditions do not apply if a proposed project is exempt from the requirement to obtain a construction permit, pursuant to s. NR 406.04, Wis. Adm. Code. [s. 299.80(2)(h) and (4)(b), Wis. Stats.]

(1) *Alternate Scenario #1:* The permittee may operate new process equipment provided the permittee submits a complete construction and operation permit application as required by the conditions of I.A.5.a. and the Department issues a construction permit pursuant to ss. 285.60 through 285.69, Wis. Stats and ss. NR 406 and NR 407, Wis. Adm. Code. The permittee shall operate the new process equipment in compliance with the conditions contained in any construction permit issued by the Department. [s. NR 406.03, Wis. Adm. Code]

---

<sup>11</sup> Pursuant to s. 299.80(10), Wis. Stats., a participant in a cooperative agreement shall pay the same fees required under chs. 280 to 295, Wis. Stats. that it would be required to pay if it had not entered into a cooperative agreement. Therefore, while the requirement to obtain a construction permit prior to installation is waived, the permittee is still required to pay the fees that would have been assessed had a construction permit been issued under ch. NR 406, wis. Adm. Code.

<sup>12</sup> By continuing to comply with the facility wide emission limitations outlined in Part I.A. the net emissions increase from any new sources or relocation of any existing sources from other facilities, will not exceed the major stationary source levels of s. NR 405.02(22)(a), Wis. Adm. Code triggering Prevention of Significant Deterioration (PSD) Requirements. The existing facility potential emissions of all criteria pollutants is less than 250 tons per year and the facility is not included in the source categories listed in s. NR 405.07(4), Wis. Adm. Code, therefore the existing facility is a synthetic minor source for PSD purposes. Note: This facility is not located in an area designated nonattainment. Also, by continuing to comply with the facility wide emissions limitations, the potential emissions increase from any new sources or relocated existing sources will not exceed 100 tons per year after controls for any criteria pollutant. Therefore none of the changes will be considered a Type II action requiring an environmental assessment. Finally, by continuing to comply with the facility wide emission limitations, the facility would not become a major source for Part 70 purposes for either volatile organic compound or hazardous air pollutant emissions. Requirement I.A.5.a.(1)(g) of this permit requires that any changes that result in potential facility wide emissions of particulate matter, sulfur dioxide, nitrogen oxide or carbon monoxide emissions exceeding 100 tons per year follow permit issuance requirements of chs. NR 406 and NR 407, Wis. Adm. Code.

(2) *Alternate Scenario #2:* The permittee may initially operate new process equipment prior to obtaining a construction permit provided the permittee submits a complete construction and operation permit application as required by the conditions of I.A.5.a. and the following conditions are met: [s. 299.80(2)(h) and (4)(b), Wis. Stats.]

(a) The permittee shall submit two copies of the following information to the Department of Natural Resources, La Crosse Area Office, 3550 Mormon Coulee Road, Room 104, La Crosse, WI, 54601 OR other location specified by the Department, 14 calendar days prior to the date of initial operation:

- (i) Information identifying all applicable requirements from the Wisconsin Statutes, Wisconsin Administrative Code, and federal Clean Air Act for the proposed equipment;
- (ii) A quantification of the air pollution emissions that would result from the proposed project;
- (iii) A computer dispersion modeling analysis showing the National Ambient Air Quality Standards will be protected if the proposed project results in an increase in potential particulate matter, sulfur dioxide, nitrogen oxide, and/or carbon monoxide emissions.
- (iv) A computer dispersion modeling analysis showing the Acceptable Ambient Concentrations will be protected if the proposed project results in an increase in emissions of any hazardous air pollutant listed in ch. NR 445, Wis. Adm. Code so that the resulting facility total emissions of the hazardous air pollutant are above the corresponding Table Value(s) OR results in the emission of any hazardous air pollutant listed in ch. NR 445, Wis. Adm. Code that was not previously emitted, at a rate greater than its corresponding Table Value(s); and
- (v) An analysis showing the proposed project will not cause the total facility wide potential emissions of particulate matter, sulfur dioxide, nitrogen oxides or carbon monoxide to exceed 100 tons per year. Any proposed new or relocated source that will result in the facility wide potential emissions of any one of these pollutants exceeding 100 tons per year is not eligible for this waiver. If the facility wide potential emissions of any one of the pollutants would be greater than 100 tons per year as the result of a proposed project, the permittee shall comply with the construction permit requirements outlined in ch. NR 406, Wis. Adm. Code and the significant operation permit revision requirements of s. NR 407.13, Wis. Adm. Code.<sup>13</sup>

[ss. 299.80(10) and (11)(b), Wis. Stats.]

(b) The Department has 14 calendar days from the date that all the information outlined in (a) is received to request additional information or object to the proposed project. If the Department requests additional information during the original 14 calendar day period the Department shall have an additional 7 calendar days from the date of receipt of the information to request additional information or object to the proposed project. Under no scenario shall the Department have less than 14 days to review original submittal. If the Department does not respond within 14 calendar days from the date that all the information outlined in (a) is submitted, or within 7 days from the date that any additional information requested by the Department is submitted, whichever is later, the permittee may commence initial operation of the proposed equipment. The Department may provide written approval to commence initial operation of the proposed equipment prior to the end of the 14 calendar day period. If this is the case the permittee may commence initial operation upon receipt of this written approval. [ss. 299.80(2)(h) and (11)(b), Wis. Stats.]

(3) *Alternate Scenario #3:* The permittee may initially operate new process equipment prior to obtaining a construction permit provided the permittee submits a complete construction and operation permit application as required by the conditions of I.A.5.a. and the following conditions are met: [s. 299.80(2)(h) and (4)(b), Wis. Stats.]

- (a) The Department provides written approval to commence initial operation of the proposed equipment. This written approval shall only be provided after the Department completes an air quality dispersion modeling analysis to ensure that the national ambient air quality standards and acceptable ambient concentrations will be protected while the proposed equipment is operating; [s. NR 406.09, Wis. Adm. Code]
- (b) The permittee shall comply with any specific conditions included in the Department's written approval to commence

---

<sup>13</sup> This requirement is necessary because if the potential emissions of particulate matter, sulfur dioxide, nitrogen oxide or carbon monoxide emissions exceeds 100 tons the facility would be considered a major source for Part 70 purposes and would be required to obtain either a Part 70 source permit or a synthetic minor, non-Part 70 source permit containing conditions that limit the potential emissions of all criteria pollutants to less than 100 tons per year.



initial operation;

(4) The permittee shall continue to comply with all the requirements of Part I.A. of this permit so long as the cooperative agreement is in affect.<sup>14</sup> [s. 299.80(2)(h) and (4)(b), Wis. Stats.]

(5) Nothing in this section or in any Cooperative Agreement between the Department and the permittee shall be construed as a guarantee that the Department will issue an air pollution control construction and operation permit for a proposed project.

---

<sup>14</sup> By continuing to comply with the facility wide emission limitations outlined in Part I.A. the net emissions increase from any new sources or relocation of any existing sources from other facilities, will not exceed the major stationary source levels of s. NR 405.02(22)(a), Wis. Adm. Code triggering Prevention of Significant Deterioration (PSD) Requirements. The existing facility potential emissions of all criteria pollutants is less than 250 tons per year and the facility is not included in the source categories listed in s. NR 405.07(4), Wis. Adm. Code, therefore the existing facility is a synthetic minor source for PSD purposes. Note: This facility is not located in an area designated nonattainment. Also, by continuing to comply with the facility wide emissions limitations, the potential emissions increase from any new sources or relocated existing sources will not exceed 100 tons per year after controls for any criteria pollutant. Therefore none of the changes will be considered a Type II action requiring an environmental assessment. Finally, by continuing to comply with the facility wide emission limitations, the facility would not become a major source for Part 70 purposes for either volatile organic compound or hazardous air pollutant emissions. Requirement I.A.5.a.(1)(g) of this permit requires that any changes that result in potential facility wide emissions of particulate matter, sulfur dioxide, nitrogen oxide or carbon monoxide emissions exceeding 100 tons per year follow permit issuance requirements of chs. NR 406 and NR 407, Wis. Adm. Code.

The decision on whether to approve a permit application will be made according to the requirements of chapters NR 400 through NR 499, Wis. Adm. Code and s. 285.60 through 285.69, Wis. Stats. If the Department denies a permit application pursuant to ss 285.61 through 285.64, Wis. Stats. all costs and risks associated with installing and operating the proposed equipment shall be incurred solely by the permittee. In the event that the construction and operation permit application for the proposed project is denied, the permittee shall cease construction and/or operation of the equipment in question immediately.

## **6. Facility Wide Reporting Requirements**

a. Submit the results of monitoring or a summary of monitoring results required by Part I.A. of this permit to the Department annually.

- (1) The time period to be addressed by the submittal are: January 1 to December 31.
- (2) The report shall be submitted to the Department of Natural Resources, La Crosse Area Office, 3550 Mormon Coulee Road, Room 104, La Crosse, WI 54601, phone (608) 785-9000 within 30 days after the end of each reporting period.
- (3) All deviations from and violations of applicable requirements shall be clearly identified in the submittal.
- (4) Each submittal shall be certified by a responsible official as to the truth, accuracy and completeness of the report.  
[s. NR 439.03(1)(b), Wis. Adm. Code]

b. Submit a certification of compliance with the requirements of Part I.A. of this permit to the Department annually.

- (1) The time period to be addressed by the report is the January 1 to December 31 period which precedes the report.
- (2) The report shall be submitted to the Wisconsin Department of Natural Resources, La Crosse Area Office, 3550 Mormon Coulee Road, Room 104, La Crosse, WI 54601, phone (608) 785-9000 within 60 days after the end of each reporting period.
- (3) The information included in the report shall comply with the requirements of Part II Section N of this permit.
- (4) Each report shall be certified by a responsible official as to the truth, accuracy and completeness of the report.  
[s. NR 439.03(1)(c), Wis. Adm. Code]

c. Report actual facility wide volatile organic compound and hazardous air pollutant emissions as follows:

- (1) The permittee shall submit a report summarizing the actual, facility wide volatile organic compound and hazardous air pollutant emissions for each consecutive 12 month period as calculated in conditions I.A.1.b.(2) and I.A.2.b.(2) and (4), every 6 months.
- (2) The period addressed by the report shall be the 6 month period starting on the date the Cooperative Agreement is signed or other date agreed upon and approved by DNR, U.S. EPA and the permittee, and each subsequent 6 month period thereafter.
- (3) A copy of the report shall be submitted to the DNR (Marty Sellers, Air Management Engineer, Department of Natural Resources, 3550 Mormon Coulee Road, La Crosse, WI 54601) and the U.S. EPA (Steve Rothblatt, Branch Chief, Air Program Branch, U.S. EPA, 77 W. Jackson Blvd., Mailcode: AR-18J, Chicago, IL 60604) within twenty days following the end of the reporting period.
- (4) If the report shows the actual facility wide volatile organic compound or hazardous air pollutant emissions have exceeded 50 percent of the allowable limitations outlined in conditions I.A.1.a and I.A.2.a.(1) and (2), the permittee shall provide an explanation why emissions reached the levels that they did and how they intend to ensure emissions will not exceed the allowable limitations outlined in conditions I.A.1.a. and I.A.2.a.(1) and (2).

[s. NR 439.03(1)(a), Wis. Adm. Code]

## **7. Compliance Testing Requirements**

a. Whenever compliance emission tests are required by the Department:

- (1) Any compliance emission tests required by the Department shall be conducted while operating at 100%

capacity. If operation at 100% capacity is not feasible, the sources shall operate at a capacity which is approved by the Department in writing.

- (2) The reference test methods outlined in this permit shall be used unless an alternate, U.S. EPA approved, test method is approved by the Department in writing.
- (3) The Department shall be informed at least 20 working days prior to any tests so a Department representative can witness the testing.
- (4) At the time of notification, a compliance test plan shall also be submitted for approval.
- (5) Two copies of the report on any required tests shall be submitted to the Department for evaluation within 60 days after the tests.

[s. NR 439.07, Wis. Adm. Code]

- B.** *Part I.A. of this operation permit is effective so long as the permittee is operating under a Cooperative Agreement with the Department as entered into under s. 299.80 Wis. Stats. If any such Cooperative Agreement expires or is revoked for any reason, Part I.A. of this operation permit is no longer effective and Part I.B. becomes the effective operation permit for the facility. If any such Cooperative Agreement expires or is revoked for any reason, the permittee shall comply with any delayed compliance deadlines and practical interim requirements established by the Department in a written revocation decision until the Department issues the approvals required under chs. 280 to 295, Wis. Stats, that were replaced by the above referenced Cooperative Agreement.*
- 1.** **P01, Stack S01 - 11 Screening Lines, With a total of 21 screening machines (plus one screening machine that is currently not on any line but can be switched with any machine that needs to be removed for repair) and eight electric drying ovens and five natural gas/propane drying ovens with a total maximum rating of 6.5 mmBtu/hr**

<b>POLLUTANT</b>	<b>(1) LIMITATIONS</b>	<b>(2) COMPLIANCE DEMONSTRATION METHODS</b>	<b>(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS</b>
<b>a.</b> Particulate Matter Emissions	<b>(a)</b> Emissions may not exceed 0.15 pounds per mmBtu heat input. [s. NR 415.06(2)(a), Wis. Adm. Code]	<b>(a)</b> The permittee shall only fire natural gas and/or propane in each of the drying ovens that are not powered by electricity. <sup>15</sup> [ss. NR 407.09(1)(c)1.b., Wis. Adm. Code]	<b>(a)</b> <u>Reference Test Method for Particulate Matter Emissions:</u> Whenever compliance emission testing is required, US EPA Methods 5 and Method 202 shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]

<sup>15</sup> Because the maximum theoretical emissions while firing these fuels are less than the allowable limit of 0.15 pounds per million Btu heat input, limiting the type of fuel used is adequate to demonstrate compliance with the particulate matter emission limit. Maximum theoretical particulate matter emissions were calculated using an emission factor of 7.6 pounds per million cubic feet of natural gas fired from AP-42, 5th edition, ch. 1.4.

<sup>16</sup> These plans and specifications are sufficient because each drying oven is designed to only burn natural gas and/or propane.

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
		and 285.65(3) and 285.63(1)(a), Wis. Stats.]	(b) The permittee shall retain on site, plans and specifications that indicate the fuel usage design capabilities of each drying oven that is not powered by electricity. <sup>16</sup> [s. NR 439.04(1)(d), Wis. Adm. Code]

1. P01, Stack S01 - 11 Screening Lines - (Continued)

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
b. Volatile Organic Compounds	<p>(a) <u>Latest Available Control Techniques:</u></p> <p>(i) The permittee may not use non-UV inks and adhesives with a VOC content greater than 6.5 pounds per gallon as applied; and</p> <p>(ii) The permittee may not use UV inks and watermarks with a VOC content greater than 1.0 pounds per gallon as applied. [s. NR 424.03(2)(c), Wis. Adm. Code]</p>	<p>(a) The permittee shall maintain the records required by I.B.1.b.(3)(c) to demonstrate compliance with I.B.1.b.(1)(a). [s. NR 407.09(4), Wis. Adm. Code]</p>	<p>(a) <u>Reference Test Method for Volatile Organic Compound Emissions:</u> Whenever compliance emission testing is required, US EPA Methods 18, 25, 25A or 25B shall be used to demonstrate compliance. [ss. NR 439.06(3)(a) and NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p>(b) <u>Reference Test Method for Volatile Organic Compound Content:</u> Whenever compliance testing is required, U.S. EPA Method 24 shall be used to demonstrate compliance with the VOC content limitations. [s. NR 439.06(3)(b), Wis. Adm. Code]</p> <p>(c) The permittee shall keep the following records for each ink and other VOC containing materials used on the screening lines:</p> <p>(i) A unique name of identification number for each ink and other VOC containing material, as applied; and</p> <p>(ii) The VOC content of each ink and other VOC containing material, as applied, in pounds per gallon. [s. NR 439.04(1)(d), Wis. Adm. Code.]</p> <p>(d) The permittee shall use U.S. EPA Method 24, or coating manufacturer's formulation data to determine the VOC content of the of the inks used. In case of an inconsistency between the Method 24 results and the formulation data, the Method 24 results will govern. [s. NR 439.04(1)(d), Wis. Adm. Code]</p>

1. P01, Stack S01 - 11 Screening Lines - (Continued)

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
c. Visible Emissions	(a) Emissions may not exceed 20% opacity [s. NR 431.05, Wis. Adm. Code]	(a) The permittee shall only fire natural gas and/or propane in each of the drying ovens that are not powered by electricity. <sup>17</sup> [ss. 285.65(3) and 285.63(1)(a), Wis. Stats.]	<p>(a) Reference Test Method for Visible Emissions: Whenever compliance emission testing is required, US EPA Method 9 shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]</p> <p>(b) The permittee shall retain on site, plans and specifications that indicate the fuel usage design capabilities each drying oven that is not powered by electricity.<sup>18</sup> [s. NR 439.04(1)(d), Wis. Adm. Code]</p>

---

<sup>17</sup> It is not expected that the visible emission limitation of 20% opacity would be exceeded while firing these fuels. Therefore restricting the type of fuel used is adequate to ensure compliance with the emission limitation.

<sup>18</sup> These plans and specifications are sufficient because each drying oven is designed to only burn natural gas and/or propane.

**2. P03, Stack S03 - Miscellaneous Facility Wide Cleanup**

**Because cleanup is performed using a wipe cleaning operation and the facility is located outside of Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha counties, it is exempt from the requirements of s. NR 423.03, Wis. Adm. Code, pursuant to s. NR 423.03(2)(g)1., Wis. Adm. Code. The cleanup solvent use is subject to general emission limitations for volatile organic compounds outline in ss. NR 419.03 and NR 419.04, Wis. Adm. Code which are included in Part II of this operation permit.**



3. P27, Stack S27 - Towel Dryer - Installed 1990

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
<p><b>a.</b> Volatile Organic Compounds</p>	<p>(a) No person may cause, allow or permit organic compound emissions into the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. [s. NR 419.03(1), Wis. Adm. Code]</p> <p>(b) No person may cause, allow or permit organic compounds to be used or handled without using good operating practices and taking reasonable precautions to prevent the spillage, escape or emission of organic compounds, solvents or mixtures. [s. NR 419.03(2), Wis. Adm. Code]</p> <p>(c) No person may cause, allow or permit the disposal of more than 1.5 gallons of any liquid VOC waste, or of any liquid, semisolid or solid waste materials containing more than 1.5 gallons of any VOC, in any one day from a facility in a manner that would permit their evaporation into the ambient air during the ozone season, except as provided for in s. NR 419.07. [s. NR 419.04(1), Wis. Adm. Code]</p> <p>(d) Disposal during the ozone season shall be by methods approved by the department, such as incineration, recovery for reuse, or transfer in closed containers to an acceptable disposal facility, such that the quantity of VOC which evaporates into the ambient air does not exceed 15% (by weight) or 1.5 gallons in any one day, whichever is larger. [s. NR 419.04(2), Wis. Adm. Code]</p>	<p>(a) The permittee shall maintain the records required by I.B.3.a.(3)(b) to demonstrate compliance with I.B.3.a(1)(a) through (d). [s. NR 407.09(4), Wis. Adm. Code]</p>	<p>(a) <u>Reference Test Method for Volatile Organic Compound Emissions:</u> Whenever compliance emission testing is required, US EPA Methods 18, 25, 25A or 25B shall be used to demonstrate compliance. [ss. NR 439.06(3)(a) and NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p>(b) For each batch of towels dried the permittee shall keep records of (i) the weight of the towels before drying; (ii) the weight of the towels after drying; and (iii) the calculated amount of VOCs that are emitted from the towel dryer. [s. NR 439.04(1)(d), Wis. Adm. Code]</p>

**4. P28, Stack S28 - Batch Screen Cleaning/Reclaiming Machine with In-line Distillation - Installed 1990**

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
<p><b>a. Volatile Organic Compounds</b></p>	<p><b>(a) Latest Available Control Techniques:</b> The permittee may not use screen washer solvents with a VOC content greater than 8 pounds per gallon and may not use screen reclaiming materials with a VOC content greater than 3 pounds per gallon. [s. NR 424.03(2)(c), Wis. Adm. Code]</p>	<p><b>(a)</b> The permittee shall maintain the records required by I.B.4.a.(3)(c) to demonstrate compliance with I.B.4.a.(1)(a). [s. NR 407.09(4), Wis. Adm. Code]</p>	<p><b>(a) Reference Test Method for Volatile Organic Compound Emissions:</b> Whenever compliance emission testing is required, US EPA Methods 18, 25, 25A or 25B shall be used to demonstrate compliance. [ss. NR 439.06(3)(a) and NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p><b>(b) Reference Test Method for Volatile Organic Compound Content:</b> Whenever compliance testing is required, U.S. EPA Method 24 shall be used to demonstrate compliance with the VOC content limitations. [s. NR 439.06(3)(b), Wis. Adm. Code]</p> <p><b>(c)</b> The permittee shall keep the following records for each screen washer solvent and reclaiming solvent used in the screen washer/reclaimer:</p> <ul style="list-style-type: none"> <li>(i) A unique name of identification number for each solvent, as applied;</li> <li>(ii) The VOC content of each solvent, as applied, in pounds per gallon;</li> <li>(iii) The total amount of solvent used in the screen cleaning machine during each month, in gallons;</li> </ul> <p>[s. NR 439.04(1)(d), Wis. Adm. Code.]</p> <p><b>(d)</b> The permittee shall use U.S. EPA Method 24, or supplier's formulation data to determine the VOC content of the of the solvents used. In case of an inconsistency between the Method 24 results and the formulation data, the Method 24 results will govern. [s. NR 439.04(1)(d), Wis. Adm. Code]</p>

**5. Synthetic Minor Conditions Applicable to the Entire Facility**

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
<p><b>a. Volatile Organic Compounds</b></p> <p><i>Continued on</i></p>	<p><b>(a)</b> Volatile organic compound emissions from the entire facility may not exceed 8.22 tons per month averaged over each 12 consecutive month period. [s. 285.65(7), Wis. Stats.]</p>	<p><b>(a)</b> Each day the permittee shall calculate the total volatile organic compound emissions from the facility as follows: [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> $E_{\text{daily}} = (1 \text{ ton}/2000 \text{ lbs}) \times [(U_1 \times W_1 \times C_1) + (U_2 \times W_2 \times C_2) + \dots + (U_n \times W_n \times C_n)]$ <p>where:  <math>E_{\text{daily}}</math> is the daily VOC emissions (tons/day);  <math>U</math> is the daily usage of each ink, coating, solvent, or other VOC containing material used during the day (gallons/day);  <math>W</math> is the density of each ink, coating, solvent, or other VOC containing material used during the month (pounds/gallon);  <math>C</math> is the VOC content of each ink, coating, solvent, or other VOC containing material used during the day expressed as a weight fraction (i.e. if a material is 25% VOC by weight <math>C</math> would be 0.25);  <math>n</math> identifies each ink, coating, solvent or other VOC containing material used during the day.</p> <p><b>(b)</b> For each calendar month the permittee shall calculate the total monthly VOC emissions as follows. This calculation shall be performed within fifteen calendar days of the end of each month. [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> $E_{\text{monthly}} = \Sigma E_{\text{daily}} - \{(1 \text{ ton}/2000 \text{ lbs}) \times [(S_1 \times P_1) + (S_2 \times P_2) + \dots + (S_m \times P_m)]\}$ <p>where:  <math>E_{\text{monthly}}</math> is the monthly VOC emissions (tons/month) taking into account credit for the waste solvents that are collected and shipped off site for disposal;  <math>\Sigma E_{\text{daily}}</math> is the sum of the daily VOC emissions calculated in I.B.5.a.(2)(a) totaled for the calendar month;  <math>S</math> is the amount of each spent ink, coating, solvent or other VOC containing material recovered each month and shipped off site (gallons/month);  <math>P</math> is the VOC content of each spent ink, coating, solvent or other VOC containing material recovered each month and shipped off site in pounds per gallon;  <math>m</math> identifies each spent ink, coating, solvent or other VOC containing material</p>	<p><b>(a)</b> The permittee shall keep daily records of the following:</p> <ul style="list-style-type: none"> <li>(i) A unique name or identification number for each ink, coating, solvent, or other VOC containing material used at the facility;</li> <li>(ii) The VOC content, expressed as a weight fraction (<math>C_n</math>) of each ink, coating, solvent, or other VOC containing material used at the facility;</li> <li>(iii) The amount of each ink, coating, solvent, or other VOC containing material used in gallons per day (<math>U_n</math>);</li> <li>(iv) The density of each ink, coating, solvent, or other VOC containing material used in pounds per gallon (<math>W_n</math>); and</li> <li>(v) The total daily VOC emissions from the facility in tons per day (<math>E_{\text{daily}}</math>), as calculated in I.B.5.a.(2)(a). [s. NR 439.04(1)(d), Wis. Adm. Code]</li> </ul>

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
Next Page...		recovered each month and shipped off site.	

**5. Synthetic Minor Conditions Applicable to the Entire Facility - Continued**

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
<b>a.</b> Volatile Organic Compounds - (Continued)		<p>(c) To demonstrate compliance with condition I.B.5.a.(1)(a), the permittee shall calculate the total tons of volatile organic compound emissions from the facility, averaged over each 12 consecutive month period by dividing the total monthly volatile organic compound emissions as calculated in I.B.5.a.(2)(b) for each 12 consecutive month period by 12. This calculation shall be performed within fifteen calendar days of the end of each month for the previous 12 consecutive month period. [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p>	<p>(b) The permittee shall keep monthly records of:</p> <p>(i) The monthly sum of the daily VOC emissions as calculated in I.B.5.a.(2)(b), (<math>\Sigma E_{\text{daily}}</math>);</p> <p>(ii) The amount of spent ink, coating, solvent, or other VOC containing material recovered each month and shipped off site in gallons per month (<math>S_m</math>);</p> <p>(iii) The VOC content of each spent ink, coating, solvent or other VOC containing material recovered each month and shipped off site in pounds per gallon (<math>P_m</math>);</p> <p>(iv) The total monthly VOC emissions from the facility in tons per month as calculated in I.B.5.a.(2)(b), (<math>E_{\text{monthly}}</math>); and</p> <p>(v) The total amount of VOC emitted from the facility averaged over each 12 consecutive month period in tons per month as calculated in I.B.5.a.(2)(c). [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(c) The permittee shall use U.S. EPA Method 24, or coating manufacturer's formulation data to determine the VOC content (<math>C_n</math>) and the density (<math>W_n</math>) of the of the inks, coatings, solvents or other VOC containing materials used. In case of an inconsistency between the Method 24 results and the formulation data, the Method 24 results will govern. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(d) The permittee shall analyze the spent ink, coating, solvent and other VOC containing material recovered and shipped off site</p>

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
			to determine the VOC content (P) no less than: (i) each time there is a substantial change to materials or process operations that may affect the characteristics of the waste stream; or (ii) quarterly, which ever is most frequent. [s. NR 439.04(1)(d), Wis. Adm. Code]

**5. Synthetic Minor Conditions Applicable to the Entire Facility - Continued**

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
<p><b>b. Hazardous Air Pollutants Regulated by the Clean Air Act</b></p> <p><i>Continued on Next Page...</i></p>	<p>(a) The permittee may not emit any single hazardous air pollutant regulated by the Clean Air Act at a rate greater than 0.83 tons per month averaged over each 12 consecutive month period. [s. 285.65.(7), Wis. Stats.]</p> <p>(b) The permittee may not emit a total of all hazardous air pollutants regulated by the Clean Air Act combined at a rate greater than 2.08 tons per month averaged over each 12 consecutive month period. [s. 285.65.(7), Wis. Stats.]</p>	<p>(a) Each day the permittee shall calculate the total facility emissions of <u>each hazardous air pollutant</u> regulated by the Clean Air Act as follows:<sup>19</sup></p> $E_x = (1 \text{ ton}/2000 \text{ lbs}) \times [(U_1 \times W_1 \times H_1) + (U_2 \times W_2 \times H_2) + \dots + (U_n \times W_n \times H_n)]$ <p>where:</p> <p><math>E_x</math> is the daily emissions of each hazardous air pollutant regulated by the Clean Air Act (tons/day);</p> <p><math>x</math> identifies each HAP emitted from the facility</p> <p><math>U</math> is the daily usage of each ink, coating, solvent, or other HAP containing material used during the day (gallons/day);</p> <p><math>W</math> is the density of each ink, coating, solvent, or other HAP containing material used during the day (pounds/gallon);</p> <p><math>H</math> is the HAP content of each ink, coating, solvent, or other HAP containing material used during the day expressed as a weight fraction (i.e. if a material is 25% HAP by weight <math>H</math> would be 0.25);</p> <p><math>n</math> identifies each ink, coating, solvent or other HAP containing material used during the day.</p> <p>[s. NR 407.09(4)(a)1., Wis. Adm. Code]</p>	<p>(a) The permittee shall keep daily records of the following:</p> <p>(i) A unique name or identification number for each ink, coating, solvent, or other HAP containing material used at the facility;</p> <p>(ii) The weight fraction of each HAP contained in the material (<math>H_n</math>) of each ink, coating, solvent, or other HAP containing material used at the facility;</p> <p>(iii) The amount of each ink, coating, solvent, or other HAP containing material used in gallons per day (<math>U_n</math>);</p> <p>(iv) The density of each ink, coating, solvent, or other HAP containing material used in pounds per gallon (<math>W_n</math>); and</p> <p>(v) The facility total daily emissions of each HAP in tons per day (<math>E_x</math>), as calculated in I.B.5.b.(2)(a); and</p> <p>(vi) The total daily HAP emissions from the facility in tons per day (<math>E_{\text{hap}}</math>), as calculated in I.B.5.b.(2)(d).</p> <p>[s. NR 439.04(1)(d), Wis. Adm. Code]</p>

<sup>19</sup> This calculation shall be performed for each hazardous air pollutant regulated by the Clean Air Act that is emitted from the facility.

**5. Synthetic Minor Conditions Applicable to the Entire Facility - Continued**

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
<p><b>b. Hazardous Air Pollutants Regulated by the Clean Air Act -</b> (Continued)</p> <p><i>Continued on Next Page...</i></p>		<p><b>(b)</b> For each calendar month the permittee shall calculate the total monthly as emissions of <u>each</u> hazardous air pollutant regulated by the Clean Air Act as follows. This calculation shall be performed within fifteen calendar days of the end of each month. [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> $E_y = (\Sigma E_x)_i - \{ (1 \text{ ton}/2000 \text{ lbs}) \times [(S_1 \times I_1) + (S_2 \times I_2) + \dots + (S_m \times I_m)] \}$ <p>where:  <math>E_y</math> is the monthly emissions of each HAP (tons/month) taking into account credit for the waste solvents that are collected and shipped off site for disposal;  <math>(\Sigma E_x)_i</math> is the sum of the daily emissions of <u>each</u> HAP (i) calculated in I.B.5.b.(2)(a) totaled for the calendar month;  <math>S</math> is the amount of each spent ink, coating, solvent or other HAP containing material recovered each month and shipped off site (gallons/month);  <math>I</math> is the HAP content of each spent ink, coating, solvent or other HAP containing material recovered each month and shipped off site in pounds per gallon;  <math>m</math> identifies each spent ink, coating, solvent or other HAP containing material recovered each month and shipped off site.</p> <p><b>(c)</b> To demonstrate compliance with condition I.B.5.b.(1)(a), the permittee shall calculate the emissions of <u>each</u> hazardous air pollutant regulated by the Clean Air Act, averaged over each 12 consecutive month period by dividing the total monthly emissions of each hazardous air pollutant regulated by the Clean Air Act as calculated in I.B.5.b.(2)(b) for each 12 consecutive month period by 12. This calculation shall be performed within fifteen calendar days of the end of each month for the previous 12 consecutive month period. [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p>	<p><b>(b)</b> The permittee shall keep monthly records of:</p> <ul style="list-style-type: none"> <li>(i) The monthly sum of the daily emissions of each HAP regulated by the Clean Air Act as calculated in I.B.5.b.(2)(b), <math>(\Sigma E_x)_i</math>;</li> <li>(ii) The amount of spent ink, coating, solvent, or other HAP containing material recovered each month and shipped off site in gallons per month (<math>S_m</math>);</li> <li>(iii) The amount of each HAP contained in each spent ink, coating, solvent or other HAP containing material recovered each month and shipped off site in pounds per gallon (<math>I_m</math>);</li> <li>(iv) The total monthly emissions of each HAP in tons per month as calculated in I.B.5.b.(2)(b), (<math>E_y</math>);</li> <li>(v) The total amount of each HAP emitted from the facility averaged over each 12 consecutive month period in tons per month as calculated in I.B.5.b.(2)(c);</li> <li>(vi) The total monthly emissions of all HAPs combined in tons per month as calculated in I.B.5.b.(2)(e); and</li> <li>(vii) The total amount of all HAPs combined emitted from the facility averaged over each 12 consecutive month period in tons per month as calculated in I.B.5.b.(2)(f).</li> </ul> <p>[s. NR 439.04(1)(d), Wis. Adm. Code]</p>

**5. Synthetic Minor Conditions Applicable to the Entire Facility - Continued**

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
<b>b. Hazardous Air Pollutants Regulated by the Clean Air Act -</b> <b>(Continued)</b>		<p><b>(d)</b> Each day the permittee shall calculate the total emissions of all hazardous air pollutants regulated by the Clean Air Act as follows:</p> $E_{hap} = \sum E_x$ <p>where:  <math>E_{hap}</math> is the daily total emissions of all hazardous air pollutants regulated by the Clean Air Act that are emitted by the facility (tons/day);  <math>E_x</math> is the daily emissions of each hazardous air pollutant regulated by the Clean Air Act (tons/day) as calculated in I.B.5.b.(2)(a);  x identifies each HAP emitted from the facility.  [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p><b>(e)</b> For each calendar month the permittee shall total the daily emissions of <u>all</u> hazardous air pollutant regulated by the Clean Air Act combined by totaling the monthly emissions of each HAP (<math>E_y</math>) as calculated in I.B.5.b.(2)(b) to determine the monthly emissions in tons per month. This calculation shall be performed within fifteen calendar days of the end of each month. [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p><b>(f)</b> To demonstrate compliance with condition I.B.5.b.(1)(b), the permittee shall calculate the total emissions of <u>all</u> hazardous air pollutants regulated by the Clean Air Act, averaged over each 12 consecutive month period by dividing the total monthly emissions of all hazardous air pollutants regulated by the Clean Air Act as calculated in I.B.5.b.(2)(e) for each 12 consecutive month period by 12. This calculation shall be performed within fifteen calendar days of the end of each month for the previous 12 consecutive month period. [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p>	<p><b>(c)</b> The permittee shall use coating manufacturer's formulation data to determine the HAP content (<math>H_n</math>) of the of the inks, coatings, solvents or other HAP containing materials used. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p><b>(d)</b> The permittee shall analyze the spent ink, coating, solvent and other HAP containing material recovered and shipped off site to determine the HAP content (H) no less than: (i) each time there is a substantial change to materials or process operations that may affect the characteristics of the waste stream; or (ii) quarterly, which ever is most frequent. [s. NR 439.04(1)(d), Wis. Adm. Code]</p>



**6. Conditions Applicable to the Entire Facility**

<b>CONDITION TYPE</b>	<b>(1) CONDITIONS</b>
<b>a. Reporting</b>	<p>(a) Submit the results of monitoring or a summary of monitoring results required by this permit to the Department annually.</p> <p>(i) The time period to be addressed by the submittal are: January 1 to December 31.</p> <p>(ii) The report shall be submitted to the Department of Natural Resources, La Crosse Area Office, 3550 Mormon Coulee Road, Room 104, La Crosse, WI 54601, phone (608) 785-9000 within 30 days after the end of each reporting period.</p> <p>(iii) All deviations from and violations of applicable requirements shall be clearly identified in the submittal.</p> <p>(iv) Each submittal shall be certified by a responsible official as to the truth, accuracy and completeness of the report. [s. NR 439.03(1)(b), Wis. Adm. Code]</p> <p>(b) Submit a certification of compliance with the requirements of this permit to the Department annually.</p> <p>(i) The time period to be addressed by the report is the January 1 to December 31 period which precedes the report.</p> <p>(ii) The report shall be submitted to the Wisconsin Department of Natural Resources, La Crosse Area Office, 3550 Mormon Coulee Road, Room 104, La Crosse, WI 54601, phone (608) 785-9000 within 60 days after the end of each reporting period.</p> <p>(iii) The information included in the report shall comply with the requirements of Part II Section N of this permit.</p> <p>(iv) Each report shall be certified by a responsible official as to the truth, accuracy and completeness of the report. [s. NR 439.03(1)(c), Wis. Adm. Code]</p>
<b>b. Compliance Testing</b>	<p>(a) Whenever compliance emission tests are required by the Department:</p> <p>(i) Any compliance emission tests required by the Department shall be conducted while operating at 100% capacity. If operation at 100% capacity is not feasible, the sources shall operate at a capacity which is approved by the Department in writing.</p> <p>(ii) The reference test methods outlined in this permit shall be used unless an alternate, U.S. EPA approved, test method is approved by the Department in writing.</p> <p>(iii) The Department shall be informed at least 20 working days prior to any tests so a Department representative can witness the testing.</p> <p>(iv) At the time of notification, a compliance test plan shall also be submitted for approval.</p> <p>(v) Two copies of the report on any required tests shall be submitted to the Department for evaluation within 60 days after the tests. [s. NR 439.07, Wis. Adm. Code]</p>

6. Conditions Applicable to the Entire Facility - Continued

CONDITION TYPE	(1) CONDITIONS
<p><u>c. Construction Permit Requirements</u></p>	<p><u>(a) Construction Notification:</u> The permittee shall inform the Wisconsin Department of Natural Resources, La Crosse Service Center Air Program, 3550 Mormon Coulee Road, Room 104, La Crosse, WI 54601, phone (608) 785-9000, in writing of the following for the modifications to process P01:</p> <p>(i) Notice of commencing construction shall be submitted within 15 days of the start of construction.</p> <p>(ii) Notice of intent to initially operate the source(s) covered by this permit, 30 days prior to the anticipated date of initial operation.</p> <p>(iii) Notice of the actual date of initial startup shall be submitted within 15 days of the initial startup.</p> <p>[s. NR 439.03(1), Wis. Adm. Code]</p> <p><u>(b) Construction Permit Expiration:</u> Construction permit 02-MEC-625 expires 18 months after the date of issuance. Construction or modification and an initial operation period for equipment shakedown, testing and Department evaluation of operation to assure conformity with the permit conditions is authorized for each emissions unit covered in this permit. Please note that the sources covered by this permit are required to meet all emission limits and conditions contained in the permit at all times, including during the initial operation period. If 18 months is an insufficient time period for construction or modification, equipment shakedown, testing and Department evaluation of operation, the permit holder may request and the Department may approve in writing an extension of this permit. [ss. 285.60(1)(a)2 and 285.66(1), Wis. Stats.; s. NR 406.12, Wis. Adm. Code]</p>
<p><u>d. Superceded Permits</u></p>	<p><u>(a) This permit supercedes permit number. 662008930-F01. [s. 285.65(3), Wis. Stats. and s. 285.65(7), Wis. Stats. ]</u></p>

## BEFORE THE DEPARTMENT OF NATURAL RESOURCES AIR MANAGEMENT PROGRAM

Wisconsin Department of Natural Resources, Air Management Program, Preliminary Determination on an Air Pollution Control Permit to Construct and Permit to Operate an Air Contaminant Source at Galesville, Trempleau County, Wisconsin.

Air Pollution Construction and Operation Permit Nos. 02-MEC-625 and 662008930-F02

Northern Engraving Corporation, 20875 W. Gale Ave has submitted to the Department of Natural Resources (DNR) permit applications including plans and specifications for the construction of two cylinder press screening lines and replacement of four existing screening machines.

The LaCrosse Service Center Air Program of the DNR has analyzed these materials and has preliminarily determined that the project should meet applicable criteria for permit approval as stated in s. 285.63, Wis. Stats., including both the emission limits and the ambient air standards and should, therefore, be approved.

The issuance of a construction permit allows the construction or modification and initial operation of a source. An operation permit allows continued operation of a source. An operation permit may be issued after the permittee demonstrates compliance with the applicable requirements.

This type of proposal normally does not have the potential to cause significant adverse environmental effects and the DNR has not prepared an Environmental Assessment of the proposal. This preliminary determination does not constitute approval from the Air Management Program or any other DNR sections which may also require a review of the project.

The DNR hereby solicits written comments from the public regarding the preliminary determination to approve the construction and operation permit application. These comments will be considered in the DNR's final decision regarding this proposal. Information, including plans and the DNR's preliminary analysis, is available for public inspection at the Department of Natural Resources Bureau of Air Management Headquarters, Seventh Floor, 101 South Webster Street, Madison, Wisconsin, at the La Crosse Service Center Air Program, 3550 Mormon Coulee Road, Room 104, La Crosse, WI 54601, and at the Galesville Public Library, 230 Main Street, Galesville, Wisconsin or contact Mary Carter at (608) 789-5544. This information is also available for downloading from the internet using a world wide web browser at: <http://www.dnr.state.wi.us/org/aw/air/reg/regs.htm>

Interested persons wishing to comment on the proposal and preliminary determinations should submit written comments within 30 days to:

Wisconsin Department of Natural Resources, La Crosse Service Center Air Program, 3550 Mormon Coulee Road, Room 104, La Crosse, WI 54601 Attn: Mary Carter.

A public hearing may be requested by individuals if the project is of significant concern to them. The request for hearing should indicate the interest of the party filing the request and reasons why a hearing is warranted. The DNR may then hold a public hearing if it determines that there is a significant public interest in holding a hearing.

Reasonable accommodation, including the provision of informational material in an alternative format, will be provided for qualified individuals with disabilities upon request.

Dated at Wisconsin Rapids, Wisconsin July 18, 2002.

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES  
For the Secretary

By /s/  
Joseph Ancel, Air Management Supervisor, Southeast Team  
West Central Region Air Program

July 18, 2002

Mary Goodman  
Northern Engraving Corporation  
803 Black River Street  
Sparta, WI 54656

File Code: 4560  
FID# 662008930  
Permit Number: 02-MEC-625

Dear Ms. Goodman:

The LaCrosse Service Center Air Program of the Department of Natural Resources has preliminarily reviewed the air pollution control permit application regarding the proposed construction and operation of two cylinder press screening lines and replacement of four existing screening machines to be located in Galesville.

The LaCrosse Service Center Air Program has prepared an analysis of the proposed project and has made a preliminary determination that it is approvable. The proposed permit limitations and conditions are included in the attached Draft Permit.

The estimate of the fees that will be charged when the construction permit is issued is as follows :

**PRELIMINARY ESTIMATE OF THE APPLICATION FEE**

Minor modification of a synthetic minor non-Part 70 source	\$2,300
Determination under s. NR 424.03, Wis. Adm. Code	\$ 400
Applicant publishes notice	(150)
Application fee submitted ( \$1350)	<u>(1350)</u>
Total:	\$1,200

This is only an estimate of the application fee. This could be changed as a result of further work being required on the application prior to issuing the permit. When you receive your construction permit you will receive the final bill for the application fee.

The Department will now accept public comments on the proposed project as required by ss. 285.61(6) and (7) and 285.62(4) and (5), Wis. Stats. Comments will be received for 30 days after publication of a Class I Legal notice. Please review the Draft Permit and provide your comments within the same 30 day period.

As requested, a copy of this public notice is attached so you may expedite the permitting process. It should be published for one day in the **La Crosse Tribune**. In return, you must provide me a notarized proof of publication prior to permit issuance.

The public input, if any, will also be reviewed to note if significant public interest in the project exists and whether a public hearing is warranted. If a hearing is warranted, it would be held within 60 days from the end of the public comment period. Finally, all public input will be used to render a final decision within another 60 days unless compliance with Wisconsin's Environmental Policy Act requires a longer time.

Please be advised that this is only a preliminary determination. If you have any questions regarding this matter, please feel free to contact me at (608) 789-5544.

Sincerely,

Mary Carter  
Air Management Engineer  
LaCrosse Service Center Air Program

Attachment

cc: J. Hanson - AM/7

July 18, 2002

File Code: 4560-1

FID #: 662008930

Permit Number: 02-MEC-625 and 662008930-F02

Galesville Public Library  
230 Main Street  
Galesville WI 54630-0697

Dear Librarian:

By Wisconsin law, the Department of Natural Resources is required to allow thirty (30) days of public comment, starting on the day of public notice, on draft air pollution construction and operation permits. In addition, the public notices related to such permits are sent to a public library located in the area of the facility requesting the permit.

Enclosed is the public notice, the preliminary determination and the draft permit for Northern Engraving Corporation located at 20875 W. Gale Ave., Galesville, Trempleau County, Wisconsin. Please retain these documents in the library for sixty (60) days for public viewing. Thank you.

Sincerely,

Mary Carter  
Air Management Engineer  
LaCrosse Service Center Air Program

Enclosure

cc: J. Hanson - AM/7

August 26, 2002

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

FILE CODE: 4530-1

FID# 662008930

Permit Number: 02-MEC-625 and 662008930-F02

Bruce Corning  
Northern Engraving Corporation  
803 Black River Street  
Sparta, WI 54656

Dear Mr. Corning

Your application for an air pollution control construction permit and significant operation permit revision has been processed in accordance with s. 285.61, Wis. Stats.

The enclosed permit is issued to provide authorization for your source to construct and operate in accordance with the requirements and conditions set forth within Parts I and II of the permit. Please read it carefully. The construction permit expires 18 months after the day this permit is issued. The revised operation permit expires **April 26, 2007**.

Enclosed with the permit is a bill for the cost of reviewing and acting upon your air pollution control permit. This bill is due and payable within 30 days of the date of the issuance of the permit. The remittance should be made payable to Wisconsin Department of Natural Resources and returned to the address on the bill. Please return one copy of the bill with your payment.

A copy of this permit should be available at the source for inspection by any authorized representative of the Department. Questions about this permit should be directed to the La Crosse Service Center Air Program, 3550 Mormon Coulee Road, Room 104, La Crosse, WI 54601, phone (608) 785-9000.

NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that Wisconsin statutes establish time periods within which requests to review Department decisions must be filed.

To request a contested case hearing pursuant to s. 285.81, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for a contested case hearing on the Secretary of the Department of Natural Resources. Any such petition for hearing shall set forth specifically the issue sought to be reviewed, the interest of the petitioner, the reasons why a hearing is warranted and the relief desired.

For judicial review of a decision pursuant to ss. 227.52 and 227.53, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review shall name the Department of Natural Resources as the respondent.

This notice is provided pursuant to s. 227.48(2), Wis. Stats.

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES

Mary Carter  
Air Management Engineer  
LaCrosse Service Center Air Program

cc: Air Enforcement Branch - EPA, Region V  
J. Hanson - AM/7

Mary Goodman, Northern Engraving Corporation, 803 Black River Street, Sparta, WI 54656

Enclosure

**BEFORE THE DEPARTMENT OF NATURAL RESOURCES  
AIR MANAGEMENT PROGRAM  
FINDINGS OF FACT  
CONCLUSIONS OF LAW  
AND DECISION**

**Findings of Fact**

The Department of Natural Resources (DNR) finds that:

- 1) Northern Engraving Corporation, 20875 W. Gale Ave, Galesville, Wisconsin, has applied for an air pollution control construction permit. The authorized representative of the facility is Bruce Corning, Vice President, Management Systems.
- 2) Northern Engraving Corporation submitted an air pollution control permit application and plans and specifications and any additional information describing the air pollution source on June 15, 2002.
- 3) DNR has reviewed Northern Engraving Corporation's air permit application, plans, specifications and other information available to DNR.
- 4) DNR has prepared an analysis and a Preliminary Determination on the approvability of the permit application.
- 5) This permit is for the construction of an air pollution source.
- 6) DNR has complied with the procedures set forth in s. 285.61, Wis. Stats.
- 7) The proposed air pollution source meets all of the applicable criteria in s. 285.63, Wis. Stats.
- 8) DNR has complied with the requirements of s. 1.11, Wis. Stats., and ch. NR 150, Wis. Adm. Code.

**Conclusions of Law**

DNR concludes that:

- 1) DNR has authority under s. 285.11(1), Wis. Stats., to promulgate rules contained in chs. NR 400-499, Wis. Adm. Code, including but not limited to rules containing emission limits, compliance schedules and compliance determination methods.
- 2) DNR has the authority under ss. 285.11(1), (5), and (6), 285.27 (1) and (2) and 285.65, Wis. Stats., and chs. NR 400-499, Wis. Adm. Code, to establish emission limits for sources of air pollution.
- 3) DNR has the authority to issue air pollution control permits and to include conditions in such permits under ss. 285.60, 285.61, 285.63 and 285.65, Wis. Stats.
- 4) The emission limits included in this permit are authorized by ss. 285.65, Wis. Stats., and chs. NR 400-499, Wis. Adm. Code.
- 5) DNR is required to comply with s. 1.11, Wis. Stats., and ch. NR 150, Wis. Adm. Code, in conjunction with issuing an air pollution control permit.

**Decision**

Northern Engraving Corporation is authorized to construct and initially operate two cylinder press screening lines and replacement of four existing screening machines as described in plans and specifications dated June 15, 2002 in conformity with the emission limits, monitoring, recordkeeping and reporting requirements and specific and general conditions set forth in this permit.



## Preamble

An Asterisk "\*" throughout this document denotes legal authority, limitations and conditions which are not federally enforceable.

### Concurrent Permit Actions Performed as Part of the Review and Issuance of Permit 662008930-F02

Construction Permits Issued in Conjunction with Permit 662008930-F02 under ch. NR 406, Wis. Adm. Code: 02-MEC-625

### Stack and Process Index

**Stack S01, Process P01 - 11 Screening Lines**

**Stack S03, Process P03 - Miscellaneous Facility Wide Cleanup**

**Stack S27, Process P27 - Towel Dryer**

**Stack S28, P28 - Batch Screen Cleaning/Reclaiming Machine with In-line Distillation**

Permit Shield Unless precluded by the Administrator of the USEPA, compliance with all emission limitations in this operation permit is considered to be compliance with all emission limitations established under ss. 285.01 to 285.87, Wis. Stats., and emission limitations under the federal clean air act, that are applicable to the source if the permit includes the applicable limitation or if the Department determines that the emission limitations do not apply. The following emission limitations were reviewed in the analysis and preliminary determination and were determined not to apply to this stationary source:

**Process P03:** Because cleanup is performed using a wipe cleaning operation and the facility is located outside of Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha counties, it is exempt from the requirements of s. NR 423.03, Wis. Adm. Code, pursuant to s. NR 423.03(2)(g)1., Wis. Adm. Code. The cleanup solvent use is subject to general emission limitations for volatile organic compounds outline in s. NR 419.03, Wis. Adm. Code which would be included in Part II of any operation permit issued by the Department.

**Facility:** Emissions from firing natural gas and propane, which are group I virgin fossil fuels, in the ovens associated with P01 are exempt from ch. NR 445, Wis. Adm. Code requirements, pursuant to ss. NR 445.04(1)(c)1., (3)(c)1, (4)(c)1., and (4r)(b)1. and ss. NR 445.05(1)(c)1., (3)(c)1, (4)(c)1., and (4r)(b)1., Wis. Adm. Code.

Part I The headings for the areas in the permit are defined below. The legal authority for these limitations or methods follows them in [brackets].

Pollutant -- This area will note which pollutant is being regulated by the permit.

Limitations -- This area will list all applicable emission limitations that apply to the source, including case-by-case limitations such as Latest Available Control Techniques (LACT), Best Available Control Technology (BACT), or Lowest Achievable Emission Rate (LAER). It will also list any voluntary restrictions on hours of operation, raw material use, or production rate requested by the permittee to limit potential to emit.

Compliance Demonstration -- The compliance demonstration methods outlined in this area may be used to demonstrate compliance the associated emission limit or work practice standard listed under the corresponding *Limitations* area. The compliance demonstration area contains limits on parameters or other mechanisms that will be monitored periodically to insure compliance with the limitations. The requirement to test as well as initial and periodic test schedules, if testing is required, will be stated here. Notwithstanding the compliance determination methods which the owner or operator of a sources is authorized to use under ch. NR 439, Wis. Adm. Code, the Department may use any relevant information or appropriate method to determine a source's compliance with applicable emission limitations.

Reference Test Methods, Recordkeeping, and Monitoring Requirements -- Specific USEPA Reference test methods or other approved test methods will be contained in this area and are the methods that must be used whenever testing is required. A reference test method will be listed even if no testing is immediately required. Also included in this area are any recordkeeping requirements and their frequency and reporting requirements. Accuracy of

monitoring equipment and frequency of monitoring shall meet, at a minimum, the requirements of ss. NR 439.055(3) and (4), Wis. Adm. Code, as specified in Part II of this permit.

Condition Type -- This column will specify other conditions that are applicable to the entire facility that may not be tied to one specific pollutant.

Conditions -- Specific conditions usually applicable to the entire facility or compliance requirements.

Compliance Demonstration -- This area contains monitoring and testing requirements and methods to demonstrate compliance with the conditions.

PART II -- This section contains the general limitations that the permittee must abide by. These requirements are standard for most sources of air pollutants so they are included in this section with every permit.

AIR POLLUTION CONTROL CONSTRUCTION PERMIT  
AIR POLLUTION CONTROL OPERATION PERMIT

EI FACILITY NO. 662008930

PERMIT NO. 02-MEC-625 and 662008930-F02

TYPE: Significant Revision of Synthetic Minor, Non-Part 70 Source Operation Permit

THIS CONSTRUCTION PERMIT EXPIRES EIGHTEEN (18) MONTHS FROM THE DATE OF ISSUANCE.

In compliance with the provisions of Chapter 285 and section 299.80 Wis. Stats., and Chapters NR 400 to NR 499, Wis. Adm. Code,

Name of Source:	Northern Engraving Corporation
Street Address:	1200 W. Gale Avenue. Galesville, Trempealeau County, Wisconsin
Responsible Official, & Title:	Bruce Corning, VP Management Systems

is authorized to operate a plastic automotive trim and nameplate manufacturing facility in conformity with the conditions herein.

**THIS OPERATION PERMIT EXPIRES APRIL 26, 2007.**

RENEWAL APPLICATION MUST BE SUBMITTED AT LEAST 12 MONTHS, BUT NOT MORE THAN 18 MONTHS, PRIOR TO THIS EXPIRATION DATE. [s. NR 407.09(1)(b)1., Wis. Adm. Code].

No permittee may continue operation of a source after the operation permit expires, unless the permittee submits a timely and complete application for renewal of the permit [s. 285.66(3), Wis. Stats. and NR 407.04(2), Wis. Adm. Code].

This authorization requires compliance by the permit holder with the emission limitations, monitoring requirements and other terms and conditions set forth in Parts I and II hereof.

Dated at Wisconsin Rapids, Wisconsin, \_\_\_\_\_.

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES  
For the Secretary

By \_\_\_\_\_  
Joseph E. Ancel, Southeast Team Supervisor  
West Central Region Air Program

**PART I**  
**SPECIFIC PERMIT CONDITIONS**

- A.** *Part I.A. of this operation permit is effective so long as the permittee is operating under a Cooperative Agreement with the Department as entered into under s. 299.80 Wis. Stats. If any such Cooperative Agreement expires or is revoked for any reason, Part I.A. of this operation permit is no longer effective and Part I.B. becomes the effective operation permit for the facility. If any such Cooperative Agreement expires or is revoked for any reason, the permittee shall comply with any delayed compliance deadlines and practical interim requirements established by the Department in a written revocation decision until the Department issues the approvals required under chs. 280 to 295, Wis. Stats, that were replaced by the above referenced Cooperative Agreement.*

**1. Volatile Organic Compound Emissions**

**a. Limitations:**

(1) The total volatile organic compound emissions from the facility may not exceed 85 tons for each 12 consecutive month period. [s. 299.80(4)(b), Wis. Stats and s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration Methods:**

(1) Each month the permittee shall calculate the total volatile organic compound emissions from the facility as follows:

$$E = (1 \text{ ton}/2000 \text{ lbs}) \times \{[(U_1 \times W_1 \times C_1) + (U_2 \times W_2 \times C_2) + \dots + (U_n \times W_n \times C_n)] - [(S_1 \times P_1) + (S_2 \times P_2) + \dots + (S_m \times P_m)]\}$$

where:

E is the monthly VOC emissions (tons/month);

U is the monthly usage of each ink, coating, solvent, or other VOC containing material used during the month (gallons/month);

W is the density of each ink, coating, solvent, or other VOC containing material used during the month (pounds/gallon)

C is the VOC content of each ink, coating, solvent, or other VOC containing material used during the month expressed as a weight fraction (i.e. if a material is 25% VOC by weight C would be 0.25);

n identifies each ink, coating, solvent or other VOC containing material used during the month;

S is the amount of each spent ink, coating, solvent or other VOC containing material recovered and shipped off site each month (gallons/month);

P is the VOC content of each spent ink, coating, solvent or other VOC containing material recovered and shipped off site each month in pounds per gallon;

m identifies each spent ink, coating, solvent or other VOC containing material recovered and shipped off site during the month.

[s. NR 407.09(4)(a)1., Wis. Adm. Code]

(2) To demonstrate compliance with condition I.A.1.a.(1), the permittee shall calculate the total volatile organic compound emissions from the facility over each 12 consecutive month period by summing the monthly volatile organic compound emissions as calculated in I.A.1.b.(1) for each consecutive 12 month period. This calculation shall be performed within twenty calendar days of the end of each month for the previous 12 consecutive month period. [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(3) The permittee shall use U.S. EPA Method 24, or coating manufacturer's formulation data to determine the VOC content ( $C_n$ ) and the density ( $W_n$ ) of the of the inks, coatings, solvents or other VOC containing materials used. In case of an inconsistency between the Method 24 results and the formulation data, the Method 24 results will govern. [s. NR 439.04(1)(d), Wis. Adm. Code]

(4) The permittee shall analyze the spent ink, coating, solvent and other VOC containing material recovered and shipped off site to determine the VOC content (P) no less than: (a) each time there is a substantial change to materials or process operations that may affect the characteristics of the waste stream; or (b) quarterly, which ever is most frequent. [s. NR 439.04(1)(d), Wis. Adm. Code]

**c. Record Keeping and Monitoring Requirements:**

(1) The permittee shall keep records of the following for each ink, coating, solvent, or other VOC containing material used at the facility:

- (a) A unique name or identification number; and
- (b) The VOC content, expressed as a weight fraction ( $C_n$ ).

[s. NR 439.04(1)(d), Wis. Adm. Code]

(2) The permittee shall keep monthly records of:

- (a) The amount of each ink, coating, solvent, or other VOC containing material used in gallons per month ( $U_n$ );
- (b) The density of each ink, coating, solvent, or other VOC containing material used in pounds per gallon ( $W_n$ );
- (c) The amount of spent ink, coating, solvent, or other VOC containing material recovered and shipped off site in gallons per month ( $S_m$ );
- (d) The VOC content of each spent ink, coating, solvent or other VOC containing material recovered and shipped off site in pounds per gallon ( $P_m$ ).
- (e) The total monthly VOC emissions from the facility in tons per month (E), as calculated in I.A.1.b.(1); and
- (f) The total VOC emissions from the facility in tons per year as calculated in I.A.1.b.(2).

[s. NR 439.04(1)(d), Wis. Adm. Code]

**d. Reference Test Methods:**

(1) Reference Test Method for Volatile Organic Compound Emissions: Whenever compliance emission testing is required, US EPA Method 18, 25, 25A or 25B shall be used to demonstrate compliance. [s. NR 439.06(3)(a), Wis. Adm. Code]

(2) Reference Test Method for Volatile Organic Compound Content: Whenever VOC content testing is required, US EPA Method 24 or 24A shall be used to determine the organic solvent content, the volume of solids, the weight of solids, the water content and the density of inks. [s. NR 439.06(3)(b), Wis. Adm. Code]

**2. Hazardous Air Pollutant Emissions**

**a. Limitations:**

(1) The emissions of each hazardous air pollutant regulated by the Clean Air Act shall be less than 8 tons for each 12 consecutive month period. [s. 299.80(4)(b), Wis. Stats.] [s. 285.65(7), Wis. Stats.]

(2) The total emissions of all hazardous air pollutants regulated by the Clean Air Act combined shall be less than 20 tons for each 12 consecutive month period. [s. 299.80(4)(b), Wis. Stats.] [s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration Methods:**

(1) Each month the permittee shall calculate the total emissions of each hazardous air pollutant from the facility regulated by the Clean Air Act as follows:<sup>20</sup>

$$E_x = (1 \text{ ton}/2000 \text{ lbs}) \times \{ [(U_1 \times W_1 \times H_1) + (U_2 \times W_2 \times H_2) + \dots + (U_n \times W_n \times H_n)] - [(S_1 \times I_1) + (S_2 \times I_2) + \dots + (S_m \times I_m)] \}$$

where:

$E_x$  is the monthly emissions of each hazardous air pollutant regulated by the Clean Air Act (tons/month);

$x$  identifies each HAP emitted from the facility

$U$  is the monthly usage of each ink, coating, solvent, or other HAP containing material used during the month (gallons/month);

---

<sup>20</sup> This calculation shall be performed for each hazardous air pollutant regulated by the Clean Air Act that is emitted from the facility.

W is the density of each ink, coating, solvent, or other HAP containing material used during the month (pounds/gallon)  
H is the HAP content of each ink, coating, solvent, or other HAP containing material used during the month expressed as a weight fraction (i.e. if a material is 25% HAP by weight H would be 0.25);  
n identifies each ink, coating, solvent or other HAP containing material used during the month;  
S is the amount of each spent ink, coating, solvent or other HAP containing material recovered and shipped off site each month (gallons/month);  
I is the HAP content of each spent ink, coating, solvent or other HAP containing material recovered and shipped off site each month in pounds per gallon;  
m identifies each spent ink, coating, solvent or other HAP containing material recovered and shipped off site during the month.  
[s. NR 407.09(4)(a)1., Wis. Adm. Code]

(2) To demonstrate compliance with condition I.A.2.a.(1), the permittee shall calculate the emissions of each hazardous air pollutant regulated by the Clean Air Act over each 12 consecutive month period by summing the monthly emissions of each hazardous air pollutant regulated by the Clean Air Act as calculated in I.A.2.b.(1) for each consecutive 12 month period. This calculation shall be performed within twenty calendar days of the end of each month for the previous 12 consecutive month period. [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(3) Each month the permittee shall calculate the total emissions of hazardous air pollutants regulated by the Clean Air Act as follows:

$$E_{\text{hap}} = \sum E_x$$

where:

$E_{\text{hap}}$  is the monthly total emissions of all hazardous air pollutants regulated by the Clean Air Act that are emitted by the facility (tons/month);

$E_x$  is the monthly emissions of each hazardous air pollutant regulated by the Clean Air Act (tons/month) as calculated in I.A.2.b.(1);

x identifies each HAP emitted from the facility.

[s. NR 407.09(4)(a)1., Wis. Adm. Code]

(4) To demonstrate compliance with condition I.A.2.a.(2), the permittee shall calculate the total emissions of all hazardous air pollutants regulated by the Clean Air Act over each 12 consecutive month period by summing the monthly emissions of all hazardous air pollutants regulated by the Clean Air Act as calculated in I.A.2.b.(3) for each consecutive 12 month period. This calculation shall be performed within twenty calendar days of the end of each month for the previous 12 consecutive month period. [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(5) The permittee shall use coating manufacturer's formulation data to determine the HAP content ( $H_n$ ) of the of the inks, coatings, solvents or other HAP containing materials used. [s. NR 439.04(1)(d), Wis. Adm. Code]

(6) The permittee shall analyze the spent ink, coating, solvent and other HAP containing material recovered and shipped off site to determine the HAP content (H) no less than: (a) each time there is a substantial change to materials or process operations that may affect the characteristics of the waste stream; or (b) quarterly, which ever is most frequent. [s. NR 439.04(1)(d), Wis. Adm. Code]

**c. Record Keeping and Monitoring Requirements:**

(1) The permittee shall keep records of the following for each ink, coating, solvent, or other HAP containing material used at the facility:

(a) A unique name or identification number; and

(b) The weight fraction of each HAP contained in the material ( $H_n$ ).

[s. NR 439.04(1)(d), Wis. Adm. Code]

(2) The permittee shall keep monthly records of:

(a) The amount of each ink, coating, solvent, or other HAP containing material used in gallons per month ( $U_n$ );

(b) The density of each ink, coating, solvent, or other HAP containing material used in pounds per gallon ( $W_n$ );

- (c) The amount of spent ink, coating, solvent, or other HAP containing material recovered and shipped off site in gallons per month ( $S_m$ );
  - (d) The amount of each HAP contained in each spent ink, coating, solvent or other HAP containing material recovered and shipped off site in pounds per gallon ( $I_m$ );
  - (e) The facility total monthly emissions of each HAP in tons per month ( $E_x$ ), as calculated in I.A.2.b.(1);
  - (f) The total monthly HAP emissions from the facility in tons per month ( $E_{hap}$ ), as calculated in I.A.2.b.(3);
  - (g) The facility total emissions of each HAP in tons per year as calculated in I.A.2.b.(2).
  - (h) The total HAP emissions from the facility in tons per year as calculated in I.A.2.b.(4).
- [s. NR 439.04(1)(d), Wis. Adm. Code]

**d. Reference Test Methods:**

(1) Reference Test Method for Hazardous Air Pollutant Emissions: Whenever compliance emission testing is required, a method approved by the Department in writing shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]

**3. Particulate Matter Emissions**

**a. Limitations:**

(1) Particulate matter emissions from each stack exhausting non-electric drying ovens may not exceed 0.15 pounds per mmBtu of heat input to each stack. [s. NR 415.06(2)(a), Wis. Adm. Code]

**b. Compliance Demonstration Methods:**

(1) The permittee shall only fire natural gas and/or propane in each non-electric drying oven at the facility.<sup>21</sup> [ss. NR 407.09(1)(c)1.b., Wis. Adm. Code and 285.65(3) and 285.63(1)(a), Wis. Stats.]

**c. Record Keeping and Monitoring Requirements:**

(1) The permittee shall retain on site, plans and specifications that indicate each drying oven's fuel usage design capabilities.<sup>22</sup> [s. NR 439.04(1)(d), Wis. Adm. Code]

**d. Reference Test Methods:**

(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, US EPA Methods 5 and Method 202 shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]

**4. Visible Emissions**

---

<sup>21</sup> Because the maximum theoretical emissions while firing these fuels are less than the allowable limit of 0.15 pounds per million Btu heat input, limiting the type of fuel used is adequate to demonstrate compliance with the particulate matter emission limit. Maximum theoretical particulate matter emissions were calculated using an emission factor of 7.6 pounds per million cubic feet of natural gas fired from AP-42, 5th edition, ch. 1.4.

<sup>22</sup> These plans and specifications are sufficient because each non-electric drying oven is designed to only burn natural gas and/or propane.

**a. Limitations:**

(1) The visible emissions from each of the stacks exhausting emissions units at the facility may not exceed 20% opacity [s. NR 431.05, Wis. Adm. Code]

**b. Compliance Demonstration Methods:**

(1) The permittee shall only fire natural gas and/or propane in each non-electric drying oven.<sup>23</sup> [ss. 285.65(3) and 285.63(1)(a), Wis. Stats.]

**c. Record Keeping and Monitoring Requirements:**

(1) The permittee shall retain on site, plans and specifications that indicate each drying oven's fuel usage design capabilities.<sup>24</sup> [s. NR 439.04(1)(d), Wis. Adm. Code]

**d. Reference Test Methods:**

(1) Reference Test Method for Visible Emissions: Whenever compliance emission testing is required, US EPA Method 9 shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

**5. Operational Flexibility**

**a. New Equipment Construction and Modification:** The permittee may commence construction or modification (but not operation) of new process equipment prior to obtaining a construction permit, provided the following conditions are met. The following conditions do not apply if a proposed project is exempt from the requirement to obtain a construction permit, pursuant to s. NR 406.04, Wis. Adm. Code. [s. 299.80(2)(h) and (4)(b), Wis. Stats.]

(1) The permittee shall submit the following information to the Department of Natural Resources, La Crosse Area Office, 3550 Mormon Coulee Road, Room 104, La Crosse, WI, 54601 **OR** other location specified by the Department:

- (a) Two copies of a complete construction and operation permit application describing the proposed equipment;
  - (b) An application fee of \$1350 or other amount as required by s. NR 410.03(1)(d), Wis. Adm. Code; and
  - (c) Information describing how the interested persons group was notified of the proposed project.
- [ss. 299.80(10) and (11)(b), Wis. Stats.]

(2) The Department shall process the permit application in accordance with ss. 285.60 through 285.69, Wis. Stats and ss. NR 406 and NR 407, Wis. Adm. Code, however, the permittee need not wait for permit issuance to commence construction. The Department shall process the permit application as both a construction permit and a significant revision to this operation permit and issue both permits simultaneously to reduce the administrative burden of issuing a construction permit that expires 18 months after issuance followed by an operation permit. The Department shall send an invoice outlining the fees required for processing the construction permit for the proposed project, including the fees for an expedited permit review authorized by s. NR 410.03(o), Wis. Adm. Code, less the \$1350 permit application fee. [ss. 299.80(2)(h), (4)(b), (10) and (11)(b), Wis.

---

<sup>23</sup> It is not expected that the visible emission limitation of 20% opacity would be exceeded while firing these fuels. Therefore restricting the type of fuel used is adequate to ensure compliance with the emission limitation for fuel burning installations. The remaining stacks at the facility exhaust volatile organic compound emissions, and visible emissions are not expected from these other emission points.

<sup>24</sup> These plans and specifications are sufficient because each non-electric drying oven is designed to only burn natural gas and/or propane.



Stats.]

(3) The permittee shall pay the total amount of the fee invoice within 30 days of receipt.<sup>25</sup> [s. 299.80(10), Wis. Stats.]

---

<sup>25</sup> Pursuant to s. 299.80(10), Wis. Stats., a participant in a cooperative agreement shall pay the same fees required under chs. 280 to 295, Wis. Stats. that it would be required to pay if it had not entered into a cooperative agreement. Therefore, while the requirement to obtain a construction permit prior to installation is waived, the permittee is still required to pay the fees that would have been assessed had a construction permit been issued under ch. NR 406, wis. Adm. Code.

(4) The permittee shall continue to comply with all the requirements of Part I.A. of this permit so long as the cooperative agreement is in affect.<sup>26</sup> [s. 299.80(2)(h) and (4)(b), Wis. Stats.]

(5) Nothing in this section or in any Cooperative Agreement between the Department and the permittee shall be construed as a guarantee that the Department will issue an air pollution control construction and operation permit for a proposed project. The decision on whether to approve a permit application will be made according to the requirements of chapters NR 400 through NR 499, Wis. Adm. Code and s. 285.60 through 285.69, Wis. Stats. If the Department denies a permit application pursuant to ss 285.61 through 285.64, Wis. Stats. all costs and risks associated with installing and operating the proposed equipment shall be incurred solely by the permittee. In the event that the construction and operation permit application for the proposed project is denied, the permittee shall cease construction of the equipment in question immediately.

- b. New Equipment Operation:** The permittee may operate new process equipment, provided one of the following alternate scenarios are met. The following conditions do not apply if a proposed project is exempt from the requirement to obtain a construction permit, pursuant to s. NR 406.04, Wis. Adm. Code. [s. 299.80(2)(h) and (4)(b), Wis. Stats.]

(1) *Alternate Scenario #1:* The permittee may operate new process equipment provided the permittee submits a complete construction and operation permit application as required by the conditions of I.A.5.a. and the Department issues a construction permit pursuant to ss. 285.60 through 285.69, Wis. Stats and ss. NR 406 and NR 407, Wis. Adm. Code. The permittee shall operate the new process equipment in compliance with the conditions contained in any construction permit issued by the Department. [s. NR 406.03, Wis. Adm. Code]

(2) *Alternate Scenario #2:* The permittee may initially operate new process equipment prior to obtaining a construction permit provided the permittee submits a complete construction and operation permit application as required by the conditions of I.A.5.a. and the following conditions are met: [s. 299.80(2)(h) and (4)(b), Wis. Stats.]

---

<sup>26</sup> By continuing to comply with the facility wide emission limitations outlined in Part I.A. the net emissions increase from any new sources or relocation of any existing sources from other facilities, will not exceed the major stationary source levels of s. NR 405.02(22)(a), Wis. Adm. Code triggering Prevention of Significant Deterioration (PSD) Requirements. The existing facility potential emissions of all criteria pollutants is less than 250 tons per year and the facility is not included in the source categories listed in s. NR 405.07(4), Wis. Adm. Code, therefore the existing facility is a synthetic minor source for PSD purposes. Note: This facility is not located in an area designated nonattainment. Also, by continuing to comply with the facility wide emissions limitations, the potential emissions increase from any new sources or relocated existing sources will not exceed 100 tons per year after controls for any criteria pollutant. Therefore none of the changes will be considered a Type II action requiring an environmental assessment. Finally, by continuing to comply with the facility wide emission limitations, the facility would not become a major source for Part 70 purposes for either volatile organic compound or hazardous air pollutant emissions. Requirement I.A.5.a.(1)(g) of this permit requires that any changes that result in potential facility wide emissions of particulate matter, sulfur dioxide, nitrogen oxide or carbon monoxide emissions exceeding 100 tons per year follow permit issuance requirements of chs. NR 406 and NR 407, Wis. Adm. Code.

- (a) The permittee shall submit two copies of the following information to the Department of Natural Resources, La Crosse Area Office, 3550 Mormon Coulee Road, Room 104, La Crosse, WI, 54601 **OR** other location specified by the Department, 14 calendar days prior to the date of initial operation:
  - (i) Information identifying all applicable requirements from the Wisconsin Statutes, Wisconsin Administrative Code, and federal Clean Air Act for the proposed equipment;
  - (ii) A quantification of the air pollution emissions that would result from the proposed project;
  - (iii) A computer dispersion modeling analysis showing the National Ambient Air Quality Standards will be protected if the proposed project results in an increase in potential particulate matter, sulfur dioxide, nitrogen oxide, and/or carbon monoxide emissions.
  - (iv) A computer dispersion modeling analysis showing the Acceptable Ambient Concentrations will be protected if the proposed project results in an increase in emissions of any hazardous air pollutant listed in ch. NR 445, Wis. Adm. Code so that the resulting facility total emissions of the hazardous air pollutant are above the corresponding Table Value(s) **OR** results in the emission of any hazardous air pollutant listed in ch. NR 445, Wis. Adm. Code that was not previously emitted, at a rate greater than its corresponding Table Value(s); and
  - (v) An analysis showing the proposed project will not cause the total facility wide potential emissions of particulate matter, sulfur dioxide, nitrogen oxides or carbon monoxide to exceed 100 tons per year. Any proposed new or relocated source that will result in the facility wide potential emissions of any one of these pollutants exceeding 100 tons per year is not eligible for this waiver. If the facility wide potential emissions of any one of the pollutants would be greater than 100 tons per year as the result of a proposed project, the permittee shall comply with the construction permit requirements outlined in ch. NR 406, Wis. Adm. Code and the significant operation permit revision requirements of s. NR 407.13, Wis. Adm. Code.<sup>27</sup>

[ss. 299.80(10) and (11)(b), Wis. Stats.]
- (b) The Department has 14 calendar days from the date that all the information outlined in (a) is received to request additional information or object to the proposed project. If the Department requests additional information during the original 14 calendar day period the Department shall have an additional 7 calendar days from the date of receipt of the information to request additional information or object to the proposed project. Under no scenario shall the Department have less than 14 days to review original submittal. If the Department does not respond within 14 calendar days from the date that all the information outlined in (a) is submitted, or within 7 days from the date that any additional information requested by the Department is submitted, whichever is later, the permittee may commence initial operation of the proposed equipment. The Department may provide written approval to commence initial operation of the proposed equipment prior to the end of the 14 calendar day period. If this is the case the permittee may commence initial operation upon receipt of this written approval. [ss. 299.80(2)(h) and (11)(b), Wis. Stats.]
- (3) *Alternate Scenario #3:* The permittee may initially operate new process equipment prior to obtaining a construction permit provided the permittee submits a complete construction and operation permit application as required by the conditions of I.A.5.a. and the following conditions are met: [s. 299.80(2)(h) and (4)(b), Wis. Stats.]
  - (a) The Department provides written approval to commence initial operation of the proposed equipment. This written approval shall only be provided after the Department completes an air quality dispersion modeling analysis to ensure that the national ambient air quality standards and acceptable ambient concentrations will be protected while the proposed equipment is operating; [s. NR 406.09, Wis. Adm. Code]
  - (b) The permittee shall comply with any specific conditions included in the Department's written approval to commence initial operation;
- (4) The permittee shall continue to comply with all the requirements of Part I.A. of this permit so long as the cooperative agreement is in affect.<sup>28</sup> [s. 299.80(2)(h) and (4)(b), Wis. Stats.]

---

<sup>27</sup> This requirement is necessary because if the potential emissions of particulate matter, sulfur dioxide, nitrogen oxide or carbon monoxide emissions exceeds 100 tons the facility would be considered a major source for Part 70 purposes and would be required to obtain either a Part 70 source permit or a synthetic minor, non-Part 70 source permit containing conditions that limit the potential emissions of all criteria pollutants to less than 100 tons per year.

<sup>28</sup> By continuing to comply with the facility wide emission limitations outlined in Part I.A. the net

---

emissions increase from any new sources or relocation of any existing sources from other facilities, will not exceed the major stationary source levels of s. NR 405.02(22)(a), Wis. Adm. Code triggering Prevention of Significant Deterioration (PSD) Requirements. The existing facility potential emissions of all criteria pollutants is less than 250 tons per year and the facility is not included in the source categories listed in s. NR 405.07(4), Wis. Adm. Code, therefore the existing facility is a synthetic minor source for PSD purposes. Note: This facility is not located in an area designated nonattainment. Also, by continuing to comply with the facility wide emissions limitations, the potential emissions increase from any new sources or relocated existing sources will not exceed 100 tons per year after controls for any criteria pollutant. Therefore none of the changes will be considered a Type II action requiring an environmental assessment. Finally, by continuing to comply with the facility wide emission limitations, the facility would not become a major source for Part 70 purposes for either volatile organic compound or hazardous air pollutant emissions. Requirement I.A.5.a.(1)(g) of this permit requires that any changes that result in potential facility wide emissions of particulate matter, sulfur dioxide, nitrogen oxide or carbon monoxide emissions exceeding 100 tons per year follow permit issuance requirements of chs. NR 406 and NR 407, Wis. Adm. Code.

(5) Nothing in this section or in any Cooperative Agreement between the Department and the permittee shall be construed as a guarantee that the Department will issue an air pollution control construction and operation permit for a proposed project. The decision on whether to approve a permit application will be made according to the requirements of chapters NR 400 through NR 499, Wis. Adm. Code and s. 285.60 through 285.69, Wis. Stats. If the Department denies a permit application pursuant to ss 285.61 through 285.64, Wis. Stats. all costs and risks associated with installing and operating the proposed equipment shall be incurred solely by the permittee. In the event that the construction and operation permit application for the proposed project is denied, the permittee shall cease construction and/or operation of the equipment in question immediately.

## **6. Facility Wide Reporting Requirements**

a. Submit the results of monitoring or a summary of monitoring results required by Part I.A. of this permit to the Department annually.

- (1) The time period to be addressed by the submittal are: January 1 to December 31.
  - (2) The report shall be submitted to the Department of Natural Resources, La Crosse Area Office, 3550 Mormon Coulee Road, Room 104, La Crosse, WI 54601, phone (608) 785-9000 within 30 days after the end of each reporting period.
  - (3) All deviations from and violations of applicable requirements shall be clearly identified in the submittal.
  - (4) Each submittal shall be certified by a responsible official as to the truth, accuracy and completeness of the report.
- [s. NR 439.03(1)(b), Wis. Adm. Code]

b. Submit a certification of compliance with the requirements of Part I.A. of this permit to the Department annually.

- (1) The time period to be addressed by the report is the January 1 to December 31 period which precedes the report.
  - (2) The report shall be submitted to the Wisconsin Department of Natural Resources, La Crosse Area Office, 3550 Mormon Coulee Road, Room 104, La Crosse, WI 54601, phone (608) 785-9000 within 60 days after the end of each reporting period.
  - (3) The information included in the report shall comply with the requirements of Part II Section N of this permit.
  - (4) Each report shall be certified by a responsible official as to the truth, accuracy and completeness of the report.
- [s. NR 439.03(1)(c), Wis. Adm. Code]

c. Report actual facility wide volatile organic compound and hazardous air pollutant emissions as follows:

- (3) The permittee shall submit a report summarizing the actual, facility wide volatile organic compound and hazardous air pollutant emissions for each consecutive 12 month period as calculated in conditions I.A.1.b.(2) and I.A.2.b.(2) and (4), every 6 months.
- (4) The period addressed by the report shall be the 6 month period starting on the date the Cooperative Agreement is signed or other date agreed upon and approved by DNR, U.S. EPA and the permittee, and each subsequent 6 month period thereafter.
- (3) A copy of the report shall be submitted to the DNR (Marty Sellers, Air Management Engineer, Department of Natural Resources, 3550 Mormon Coulee Road, La Crosse, WI 54601) and the U.S. EPA (Steve Rothblatt, Branch Chief, Air Program Branch, U.S. EPA, 77 W. Jackson Blvd., Mailcode: AR-18J, Chicago, IL 60604) within twenty days following the end of the reporting period.
- (5) If the report shows the actual facility wide volatile organic compound or hazardous air pollutant emissions have exceeded 50 percent of the allowable limitations outlined in conditions I.A.1.a and I.A.2.a.(1) and (2), the permittee shall provide an explanation why emissions reached the levels that they did and how they intend to ensure emissions will not exceed the allowable limitations outlined in conditions I.A.1.a. and I.A.2.a.(1) and (2).

[s. NR 439.03(1)(a), Wis. Adm. Code]

## **7. Compliance Testing Requirements**

a. Whenever compliance emission tests are required by the Department:

- (1) Any compliance emission tests required by the Department shall be conducted while operating at 100% capacity. If operation at 100% capacity is not feasible, the sources shall operate at a capacity which is approved by the Department in writing.
- (2) The reference test methods outlined in this permit shall be used unless an alternate, U.S. EPA approved, test method is approved by the Department in writing.
- (3) The Department shall be informed at least 20 working days prior to any tests so a Department representative can witness the testing.
- (4) At the time of notification, a compliance test plan shall also be submitted for approval.
- (5) Two copies of the report on any required tests shall be submitted to the Department for evaluation within 60 days after the tests.

[s. NR 439.07, Wis. Adm. Code]

- B.** *Part I.A. of this operation permit is effective so long as the permittee is operating under a Cooperative Agreement with the Department as entered into under s. 299.80 Wis. Stats. If any such Cooperative Agreement expires or is revoked for any reason, Part I.A. of this operation permit is no longer effective and Part I.B. becomes the effective operation permit for the facility. If any such Cooperative Agreement expires or is revoked for any reason, the permittee shall comply with any delayed compliance deadlines and practical interim requirements established by the Department in a written revocation decision until the Department issues the approvals required under chs. 280 to 295, Wis. Stats, that were replaced by the above referenced Cooperative Agreement.*
- 1.** **P01, Stack S01 - 11 Screening Lines, With a total of 21 screening machines (plus one screening machine that is currently not on any line but can be switched with any machine that needs to be removed for repair) and eight electric drying ovens and five natural gas/propane drying ovens with a total maximum rating of 6.5 mmBtu/hr**

<b>POLLUTANT</b>	<b>(1) LIMITATIONS</b>	<b>(2) COMPLIANCE DEMONSTRATION METHODS</b>	<b>(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS</b>
<b>a.</b> Particulate Matter Emissions	<b>(a)</b> Emissions may not exceed 0.15 pounds per mmBtu heat input. [s. NR 415.06(2)(a), Wis. Adm. Code]	<b>(a)</b> The permittee shall only fire natural gas and/or propane in each of the drying ovens that are not powered by electricity. <sup>29</sup> [ss. NR 407.09(1)(c)1.b., Wis. Adm. Code and 285.65(3) and 285.63(1)(a), Wis.	<b>(a)</b> <u>Reference Test Method for Particulate Matter Emissions:</u> Whenever compliance emission testing is required, US EPA Methods 5 and Method 202 shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]

<sup>29</sup> Because the maximum theoretical emissions while firing these fuels are less than the allowable limit of 0.15 pounds per million Btu heat input, limiting the type of fuel used is adequate to demonstrate compliance with the particulate matter emission limit. Maximum theoretical particulate matter emissions were calculated using an emission factor of 7.6 pounds per million cubic feet of natural gas fired from AP-42, 5th edition, ch. 1.4.

<sup>30</sup> These plans and specifications are sufficient because each drying oven is designed to only burn natural gas and/or propane.

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
		Stats.]	(b) The permittee shall retain on site, plans and specifications that indicate the fuel usage design capabilities of each drying oven that is not powered by electricity. <sup>30</sup> [s. NR 439.04(1)(d), Wis. Adm. Code]



1. P01, Stack S01 - 11 Screening Lines - (Continued)

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
b. Volatile Organic Compounds	<p>(a) <u>Latest Available Control Techniques:</u></p> <p>(i) The permittee may not use non-UV inks and adhesives with a VOC content greater than 6.5 pounds per gallon as applied; and</p> <p>(ii) The permittee may not use UV inks and watermarks with a VOC content greater than 1.0 pounds per gallon as applied. [s. NR 424.03(2)(c), Wis. Adm. Code]</p>	<p>(a) The permittee shall maintain the records required by I.B.1.b.(3)(c) to demonstrate compliance with I.B.1.b.(1)(a). [s. NR 407.09(4), Wis. Adm. Code]</p>	<p>(a) <u>Reference Test Method for Volatile Organic Compound Emissions:</u> Whenever compliance emission testing is required, US EPA Methods 18, 25, 25A or 25B shall be used to demonstrate compliance. [ss. NR 439.06(3)(a) and NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p>(b) <u>Reference Test Method for Volatile Organic Compound Content:</u> Whenever compliance testing is required, U.S. EPA Method 24 shall be used to demonstrate compliance with the VOC content limitations. [s. NR 439.06(3)(b), Wis. Adm. Code]</p> <p>(c) The permittee shall keep the following records for each ink and other VOC containing materials used on the screening lines:</p> <p>(i) A unique name of identification number for each ink and other VOC containing material, as applied; and</p> <p>(ii) The VOC content of each ink and other VOC containing material, as applied, in pounds per gallon. [s. NR 439.04(1)(d), Wis. Adm. Code.]</p> <p>(d) The permittee shall use U.S. EPA Method 24, or coating manufacturer's formulation data to determine the VOC content of the of the inks used. In case of an inconsistency between the Method 24 results and the formulation data, the Method 24 results will govern. [s. NR 439.04(1)(d), Wis. Adm. Code]</p>

1. P01, Stack S01 - 11 Screening Lines - (Continued)

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
c. Visible Emissions	(a) Emissions may not exceed 20% opacity [s. NR 431.05, Wis. Adm. Code]	(a) The permittee shall only fire natural gas and/or propane in each of the drying ovens that are not powered by electricity. <sup>31</sup> [ss. 285.65(3) and 285.63(1)(a), Wis. Stats.]	<p>(a) Reference Test Method for Visible Emissions: Whenever compliance emission testing is required, US EPA Method 9 shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]</p> <p>(b) The permittee shall retain on site, plans and specifications that indicate the fuel usage design capabilities each drying oven that is not powered by electricity.<sup>32</sup> [s. NR 439.04(1)(d), Wis. Adm. Code]</p>

---

<sup>31</sup> It is not expected that the visible emission limitation of 20% opacity would be exceeded while firing these fuels. Therefore restricting the type of fuel used is adequate to ensure compliance with the emission limitation.

<sup>32</sup> These plans and specifications are sufficient because each drying oven is designed to only burn natural gas and/or propane.

**2. P03, Stack S03 - Miscellaneous Facility Wide Cleanup**

**Because cleanup is performed using a wipe cleaning operation and the facility is located outside of Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha counties, it is exempt from the requirements of s. NR 423.03, Wis. Adm. Code, pursuant to s. NR 423.03(2)(g)1., Wis. Adm. Code. The cleanup solvent use is subject to general emission limitations for volatile organic compounds outline in ss. NR 419.03 and NR 419.04, Wis. Adm. Code which are included in Part II of this operation permit.**

3. P27, Stack S27 - Towel Dryer - Installed 1990

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
a. Volatile Organic Compounds	<p>(a) No person may cause, allow or permit organic compound emissions into the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. [s. NR 419.03(1), Wis. Adm. Code]</p> <p>(b) No person may cause, allow or permit organic compounds to be used or handled without using good operating practices and taking reasonable precautions to prevent the spillage, escape or emission of organic compounds, solvents or mixtures. [s. NR 419.03(2), Wis. Adm. Code]</p> <p>(c) No person may cause, allow or permit the disposal of more than 1.5 gallons of any liquid VOC waste, or of any liquid, semisolid or solid waste materials containing more than 1.5 gallons of any VOC, in any one day from a facility in a manner that would permit their evaporation into the ambient air during the ozone season, except as provided for in s. NR 419.07. [s. NR 419.04(1), Wis. Adm. Code]</p> <p>(d) Disposal during the ozone season shall be by methods approved by the department, such as incineration, recovery for reuse, or transfer in closed containers to an acceptable disposal facility, such that the quantity of VOC which evaporates into the ambient air does not exceed 15% (by weight) or 1.5 gallons in any one day, whichever is larger. [s. NR 419.04(2), Wis. Adm. Code]</p>	<p>(a) The permittee shall maintain the records required by I.B.3.a.(3)(b) to demonstrate compliance with I.B.3.a(1)(a) through (d). [s. NR 407.09(4), Wis. Adm. Code]</p>	<p>(a) <u>Reference Test Method for Volatile Organic Compound Emissions</u>: Whenever compliance emission testing is required, US EPA Methods 18, 25, 25A or 25B shall be used to demonstrate compliance. [ss. NR 439.06(3)(a) and NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p>(b) For each batch of towels dried the permittee shall keep records of (i) the weight of the towels before drying; (ii) the weight of the towels after drying; and (iii) the calculated amount of VOCs that are emitted from the towel dryer. [s. NR 439.04(1)(d), Wis. Adm. Code]</p>

**4. P28, Stack S28 - Batch Screen Cleaning/Reclaiming Machine with In-line Distillation - Installed 1990**

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
<p><b>a. Volatile Organic Compounds</b></p>	<p><b>(a) Latest Available Control Techniques:</b> The permittee may not use screen washer solvents with a VOC content greater than 8 pounds per gallon and may not use screen reclaiming materials with a VOC content greater than 3 pounds per gallon. [s. NR 424.03(2)(c), Wis. Adm. Code]</p>	<p><b>(a)</b> The permittee shall maintain the records required by I.B.4.a.(3)(c) to demonstrate compliance with I.B.4.a.(1)(a). [s. NR 407.09(4), Wis. Adm. Code]</p>	<p><b>(a) Reference Test Method for Volatile Organic Compound Emissions:</b> Whenever compliance emission testing is required, US EPA Methods 18, 25, 25A or 25B shall be used to demonstrate compliance. [ss. NR 439.06(3)(a) and NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p><b>(b) Reference Test Method for Volatile Organic Compound Content:</b> Whenever compliance testing is required, U.S. EPA Method 24 shall be used to demonstrate compliance with the VOC content limitations. [s. NR 439.06(3)(b), Wis. Adm. Code]</p> <p><b>(c)</b> The permittee shall keep the following records for each screen washer solvent and reclaiming solvent used in the screen washer/reclaimer:</p> <ul style="list-style-type: none"> <li>(i) A unique name of identification number for each solvent, as applied;</li> <li>(ii) The VOC content of each solvent, as applied, in pounds per gallon;</li> <li>(iii) The total amount of solvent used in the screen cleaning machine during each month, in gallons;</li> </ul> <p>[s. NR 439.04(1)(d), Wis. Adm. Code.]</p> <p><b>(d)</b> The permittee shall use U.S. EPA Method 24, or supplier's formulation data to determine the VOC content of the of the solvents used. In case of an inconsistency between the Method 24 results and the formulation data, the Method 24 results will govern. [s. NR 439.04(1)(d), Wis. Adm. Code]</p>

## 5. Synthetic Minor Conditions Applicable to the Entire Facility

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
<p><b>a. Volatile Organic Compounds</b></p> <p><i>Continued on Next Page...</i></p>	<p><b>(a)</b> Volatile organic compound emissions from the entire facility may not exceed 8.22 tons per month averaged over each 12 consecutive month period. [s. 285.65(7), Wis. Stats.]</p>	<p><b>(a)</b> Each day the permittee shall calculate the total volatile organic compound emissions from the facility as follows: [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> $E_{\text{daily}} = (1 \text{ ton}/2000 \text{ lbs}) \times [(U_1 \times W_1 \times C_1) + (U_2 \times W_2 \times C_2) + \dots + (U_n \times W_n \times C_n)]$ <p>where:  <math>E_{\text{daily}}</math> is the daily VOC emissions (tons/day);  <math>U</math> is the daily usage of each ink, coating, solvent, or other VOC containing material used during the day (gallons/day);  <math>W</math> is the density of each ink, coating, solvent, or other VOC containing material used during the month (pounds/gallon);  <math>C</math> is the VOC content of each ink, coating, solvent, or other VOC containing material used during the day expressed as a weight fraction (i.e. if a material is 25% VOC by weight <math>C</math> would be 0.25);  <math>n</math> identifies each ink, coating, solvent or other VOC containing material used during the day.</p> <p><b>(b)</b> For each calendar month the permittee shall calculate the total monthly VOC emissions as follows. This calculation shall be performed within fifteen calendar days of the end of each month. [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> $E_{\text{monthly}} = \Sigma E_{\text{daily}} - \{(1 \text{ ton}/2000 \text{ lbs}) \times [(S_1 \times P_1) + (S_2 \times P_2) + \dots + (S_m \times P_m)]\}$ <p>where:  <math>E_{\text{monthly}}</math> is the monthly VOC emissions (tons/month) taking into account credit for the waste solvents that are collected and shipped off site for disposal;  <math>\Sigma E_{\text{daily}}</math> is the sum of the daily VOC emissions calculated in I.B.5.a.(2)(a) totaled for the calendar month;  <math>S</math> is the amount of each spent ink, coating, solvent or other VOC containing material recovered each month and shipped off site (gallons/month);  <math>P</math> is the VOC content of each spent ink, coating, solvent or other VOC containing material recovered each month and shipped off site in pounds per gallon;  <math>m</math> identifies each spent ink, coating, solvent or other VOC containing material recovered each month and shipped off site.</p>	<p><b>(a)</b> The permittee shall keep daily records of the following:</p> <ul style="list-style-type: none"> <li>(i) A unique name or identification number for each ink, coating, solvent, or other VOC containing material used at the facility;</li> <li>(ii) The VOC content, expressed as a weight fraction (<math>C_n</math>) of each ink, coating, solvent, or other VOC containing material used at the facility;</li> <li>(iii) The amount of each ink, coating, solvent, or other VOC containing material used in gallons per day (<math>U_n</math>);</li> <li>(iv) The density of each ink, coating, solvent, or other VOC containing material used in pounds per gallon (<math>W_n</math>); and</li> <li>(v) The total daily VOC emissions from the facility in tons per day (<math>E_{\text{daily}}</math>), as calculated in I.B.5.a.(2)(a). [s. NR 439.04(1)(d), Wis. Adm. Code]</li> </ul>

**5. Synthetic Minor Conditions Applicable to the Entire Facility - Continued**

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
<p><b>a. Volatile Organic Compounds - (Continued)</b></p>		<p>(c) To demonstrate compliance with condition I.B.5.a.(1)(a), the permittee shall calculate the total tons of volatile organic compound emissions from the facility, averaged over each 12 consecutive month period by dividing the total monthly volatile organic compound emissions as calculated in I.B.5.a.(2)(b) for each 12 consecutive month period by 12. This calculation shall be performed within fifteen calendar days of the end of each month for the previous 12 consecutive month period. [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p>	<p>(b) The permittee shall keep monthly records of:</p> <ul style="list-style-type: none"> <li>(i) The monthly sum of the daily VOC emissions as calculated in I.B.5.a.(2)(b), (<math>\Sigma E_{\text{daily}}</math>);</li> <li>(ii) The amount of spent ink, coating, solvent, or other VOC containing material recovered each month and shipped off site in gallons per month (<math>S_m</math>);</li> <li>(iii) The VOC content of each spent ink, coating, solvent or other VOC containing material recovered each month and shipped off site in pounds per gallon (<math>P_m</math>);</li> <li>(iv) The total monthly VOC emissions from the facility in tons per month as calculated in I.B.5.a.(2)(b), (<math>E_{\text{monthly}}</math>); and</li> <li>(v) The total amount of VOC emitted from the facility averaged over each 12 consecutive month period in tons per month as calculated in I.B.5.a.(2)(c).</li> </ul> <p>[s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(c) The permittee shall use U.S. EPA Method 24, or coating manufacturer's formulation data to determine the VOC content (<math>C_n</math>) and the density (<math>W_n</math>) of the of the inks, coatings, solvents or other VOC containing materials used. In case of an inconsistency between the Method 24 results and the formulation data, the Method 24 results will govern. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(d) The permittee shall analyze the spent ink, coating, solvent and other VOC containing material recovered and shipped off site to determine the VOC content (P) no less than: (i) each time there is a substantial change to materials or process operations that may affect the characteristics of the waste stream; or (ii) quarterly, which ever is most frequent. [s. NR 439.04(1)(d), Wis. Adm. Code]</p>

## 5. Synthetic Minor Conditions Applicable to the Entire Facility - Continued

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
<b>b. Hazardous Air Pollutants Regulated by the Clean Air Act</b>  <i>Continued on Next Page...</i>	<p><b>(a)</b> The permittee may not emit any single hazardous air pollutant regulated by the Clean Air Act at a rate greater than 0.83 tons per month averaged over each 12 consecutive month period. [s. 285.65.(7), Wis. Stats.]</p> <p><b>(b)</b> The permittee may not emit a total of all hazardous air pollutants regulated by the Clean Air Act combined at a rate greater than 2.08 tons per month averaged over each 12 consecutive month period. [s. 285.65.(7), Wis. Stats.]</p>	<p><b>(a)</b> Each day the permittee shall calculate the total facility emissions of <u>each hazardous air pollutant</u> regulated by the Clean Air Act as follows:<sup>33</sup></p> $E_x = (1 \text{ ton}/2000 \text{ lbs}) \times [(U_1 \times W_1 \times H_1) + (U_2 \times W_2 \times H_2) + \dots + (U_n \times W_n \times H_n)]$ <p>where:  <math>E_x</math> is the daily emissions of each hazardous air pollutant regulated by the Clean Air Act (tons/day);  <math>x</math> identifies each HAP emitted from the facility  <math>U</math> is the daily usage of each ink, coating, solvent, or other HAP containing material used during the day (gallons/day);  <math>W</math> is the density of each ink, coating, solvent, or other HAP containing material used during the day (pounds/gallon);  <math>H</math> is the HAP content of each ink, coating, solvent, or other HAP containing material used during the day expressed as a weight fraction (i.e. if a material is 25% HAP by weight <math>H</math> would be 0.25);  <math>n</math> identifies each ink, coating, solvent or other HAP containing material used during the day.  [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p>	<p><b>(a)</b> The permittee shall keep daily records of the following:</p> <ul style="list-style-type: none"> <li>(i) A unique name or identification number for each ink, coating, solvent, or other HAP containing material used at the facility;</li> <li>(ii) The weight fraction of each HAP contained in the material (<math>H_n</math>) of each ink, coating, solvent, or other HAP containing material used at the facility;</li> <li>(iii) The amount of each ink, coating, solvent, or other HAP containing material used in gallons per day (<math>U_n</math>);</li> <li>(iv) The density of each ink, coating, solvent, or other HAP containing material used in pounds per gallon (<math>W_n</math>); and</li> <li>(v) The facility total daily emissions of each HAP in tons per day (<math>E_x</math>), as calculated in I.B.5.b.(2)(a); and</li> <li>(vi) The total daily HAP emissions from the facility in tons per day (<math>E_{\text{hap}}</math>), as calculated in I.B.5.b.(2)(d).</li> </ul> <p>[s. NR 439.04(1)(d), Wis. Adm. Code]</p>

<sup>33</sup> This calculation shall be performed for each hazardous air pollutant regulated by the Clean Air Act that is emitted from the facility.



**5. Synthetic Minor Conditions Applicable to the Entire Facility - Continued**

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
<p><b>b. Hazardous Air Pollutants Regulated by the Clean Air Act -</b> (Continued)</p> <p><i>Continued on Next Page...</i></p>		<p><b>(b)</b> For each calendar month the permittee shall calculate the total monthly as emissions of <u>each</u> hazardous air pollutant regulated by the Clean Air Act as follows. This calculation shall be performed within fifteen calendar days of the end of each month. [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> $E_y = (\Sigma E_x)_i - \{ (1 \text{ ton}/2000 \text{ lbs}) \times [(S_1 \times I_1) + (S_2 \times I_2) + \dots + (S_m \times I_m)] \}$ <p>where:  <math>E_y</math> is the monthly emissions of each HAP (tons/month) taking into account credit for the waste solvents that are collected and shipped off site for disposal;  <math>(\Sigma E_x)_i</math> is the sum of the daily emissions of <u>each</u> HAP (i) calculated in I.B.5.b.(2)(a) totaled for the calendar month;  <math>S</math> is the amount of each spent ink, coating, solvent or other HAP containing material recovered each month and shipped off site (gallons/month);  <math>I</math> is the HAP content of each spent ink, coating, solvent or other HAP containing material recovered each month and shipped off site in pounds per gallon;  <math>m</math> identifies each spent ink, coating, solvent or other HAP containing material recovered each month and shipped off site.</p> <p><b>(c)</b> To demonstrate compliance with condition I.B.5.b.(1)(a), the permittee shall calculate the emissions of <u>each</u> hazardous air pollutant regulated by the Clean Air Act, averaged over each 12 consecutive month period by dividing the total monthly emissions of each hazardous air pollutant regulated by the Clean Air Act as calculated in I.B.5.b.(2)(b) for each 12 consecutive month period by 12. This calculation shall be performed within fifteen calendar days of the end of each month for the previous 12 consecutive month period. [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p>	<p><b>(b)</b> The permittee shall keep monthly records of:</p> <ul style="list-style-type: none"> <li>(i) The monthly sum of the daily emissions of each HAP regulated by the Clean Air Act as calculated in I.B.5.b.(2)(b), <math>(\Sigma E_x)_i</math>;</li> <li>(ii) The amount of spent ink, coating, solvent, or other HAP containing material recovered each month and shipped off site in gallons per month (<math>S_m</math>);</li> <li>(iii) The amount of each HAP contained in each spent ink, coating, solvent or other HAP containing material recovered each month and shipped off site in pounds per gallon (<math>I_m</math>);</li> <li>(iv) The total monthly emissions of each HAP in tons per month as calculated in I.B.5.b.(2)(b), (<math>E_y</math>);</li> <li>(v) The total amount of each HAP emitted from the facility averaged over each 12 consecutive month period in tons per month as calculated in I.B.5.b.(2)(c);</li> <li>(vi) The total monthly emissions of all HAPs combined in tons per month as calculated in I.B.5.b.(2)(e); and</li> <li>(vii) The total amount of all HAPs combined emitted from the facility averaged over each 12 consecutive month period in tons per month as calculated in I.B.5.b.(2)(f).</li> </ul> <p>[s. NR 439.04(1)(d), Wis. Adm. Code]</p>

**5. Synthetic Minor Conditions Applicable to the Entire Facility - Continued**

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
<b>b. Hazardous Air Pollutants Regulated by the Clean Air Act -</b> <b>(Continued)</b>		<p><b>(d)</b> Each day the permittee shall calculate the <u>total</u> emissions of all hazardous air pollutants regulated by the Clean Air Act as follows:</p> $E_{\text{hap}} = \sum E_x$ <p>where:  <math>E_{\text{hap}}</math> is the daily total emissions of all hazardous air pollutants regulated by the Clean Air Act that are emitted by the facility (tons/day);  <math>E_x</math> is the daily emissions of each hazardous air pollutant regulated by the Clean Air Act (tons/day) as calculated in I.B.5.b.(2)(a);  x identifies each HAP emitted from the facility.  [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p><b>(e)</b> For each calendar month the permittee shall total the daily emissions of <u>all</u> hazardous air pollutant regulated by the Clean Air Act combined by totaling the monthly emissions of each HAP (<math>E_y</math>) as calculated in I.B.5.b.(2)(b) to determine the monthly emissions in tons per month. This calculation shall be performed within fifteen calendar days of the end of each month. [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p><b>(f)</b> To demonstrate compliance with condition I.B.5.b.(1)(b), the permittee shall calculate the total emissions of <u>all</u> hazardous air pollutants regulated by the Clean Air Act, averaged over each 12 consecutive month period by dividing the total monthly emissions of all hazardous air pollutants regulated by the Clean Air Act as calculated in I.B.5.b.(2)(e) for each 12 consecutive month period by 12. This calculation shall be performed within fifteen calendar days of the end of each month for the previous 12 consecutive month period. [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p>	<p><b>(c)</b> The permittee shall use coating manufacturer's formulation data to determine the HAP content (<math>H_n</math>) of the of the inks, coatings, solvents or other HAP containing materials used. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p><b>(d)</b> The permittee shall analyze the spent ink, coating, solvent and other HAP containing material recovered and shipped off site to determine the HAP content (H) no less than: (i) each time there is a substantial change to materials or process operations that may affect the characteristics of the waste stream; or (ii) quarterly, which ever is most frequent. [s. NR 439.04(1)(d), Wis. Adm. Code]</p>

**6. Conditions Applicable to the Entire Facility**

<b>CONDITION TYPE</b>	<b>(1) CONDITIONS</b>
<b>a. Reporting</b>	<p>(a) Submit the results of monitoring or a summary of monitoring results required by this permit to the Department annually.</p> <p>(i) The time period to be addressed by the submittal are: January 1 to December 31.</p> <p>(ii) The report shall be submitted to the Department of Natural Resources, La Crosse Area Office, 3550 Mormon Coulee Road, Room 104, La Crosse, WI 54601, phone (608) 785-9000 within 30 days after the end of each reporting period.</p> <p>(iii) All deviations from and violations of applicable requirements shall be clearly identified in the submittal.</p> <p>(iv) Each submittal shall be certified by a responsible official as to the truth, accuracy and completeness of the report. [s. NR 439.03(1)(b), Wis. Adm. Code]</p> <p>(b) Submit a certification of compliance with the requirements of this permit to the Department annually.</p> <p>(i) The time period to be addressed by the report is the January 1 to December 31 period which precedes the report.</p> <p>(ii) The report shall be submitted to the Wisconsin Department of Natural Resources, La Crosse Area Office, 3550 Mormon Coulee Road, Room 104, La Crosse, WI 54601, phone (608) 785-9000 within 60 days after the end of each reporting period.</p> <p>(iii) The information included in the report shall comply with the requirements of Part II Section N of this permit.</p> <p>(iv) Each report shall be certified by a responsible official as to the truth, accuracy and completeness of the report. [s. NR 439.03(1)(c), Wis. Adm. Code]</p>
<b>b. Compliance Testing</b>	<p>(a) Whenever compliance emission tests are required by the Department:</p> <p>(i) Any compliance emission tests required by the Department shall be conducted while operating at 100% capacity. If operation at 100% capacity is not feasible, the sources shall operate at a capacity which is approved by the Department in writing.</p> <p>(ii) The reference test methods outlined in this permit shall be used unless an alternate, U.S. EPA approved, test method is approved by the Department in writing.</p> <p>(iii) The Department shall be informed at least 20 working days prior to any tests so a Department representative can witness the testing.</p> <p>(iv) At the time of notification, a compliance test plan shall also be submitted for approval.</p> <p>(v) Two copies of the report on any required tests shall be submitted to the Department for evaluation within 60 days after the tests. [s. NR 439.07, Wis. Adm. Code]</p>

**6. Conditions Applicable to the Entire Facility - Continued**

<b>CONDITION TYPE</b>	<b>(1) CONDITIONS</b>
<b>c. Construction Permit Requirements</b>	<p><b>(a) <u>Construction Notification:</u></b> The permittee shall inform the Wisconsin Department of Natural Resources, La Crosse Service Center Air Program, 3550 Mormon Coulee Road, Room 104, La Crosse, WI 54601, phone (608) 785-9000, in writing of the following for the modifications to process P01:</p> <ul style="list-style-type: none"> <li>(i) Notice of commencing construction shall be submitted within 15 days of the start of construction.</li> <li>(ii) Notice of intent to initially operate the source(s) covered by this permit, 30 days prior to the anticipated date of initial operation.</li> <li>(iii) Notice of the actual date of initial startup shall be submitted within 15 days of the initial startup. [s. NR 439.03(1), Wis. Adm. Code]</li> </ul> <p><b>(b) <u>Construction Permit Expiration:</u></b> Construction permit 02-MEC-625 expires 18 months after the date of issuance. Construction or modification and an initial operation period for equipment shakedown, testing and Department evaluation of operation to assure conformity with the permit conditions is authorized for each emissions unit covered in this permit. Please note that the sources covered by this permit are required to meet all emission limits and conditions contained in the permit at all times, including during the initial operation period. If 18 months is an insufficient time period for construction or modification, equipment shakedown, testing and Department evaluation of operation, the permit holder may request and the Department may approve in writing an extension of this permit. [ss. 285.60(1)(a)2 and 285.66(1), Wis. Stats.; s. NR 406.12, Wis. Adm. Code]</p>
<b>d. Superceded Permits</b>	<p><b>(a)</b> This permit supercedes permit number. 662008930-F01. [s. 285.65(3), Wis. Stats. and s. 285.65(7), Wis. Stats. ]</p>